APPENDIX 3

THE ECONOMIC BACKGROUND OF DOMINION-PROVINCIAL RELATIONS

A Study Prepared for the Royal Commission on Dominion-Provincial Relations

BY . . .
W. A. MACKINTOSH

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CONTENTS

CONTENTS—Concluded

LIST OF TABLES

LIST OF CHARTS

The Economic Background of Dominion-Provincial Relations

EDITORIAL FOREWORD

Dr. W. A. Mackintosh, professor of Economics at Queen's University, was retained by The Royal Commission on Dominion-Provincial Relations to make a study of the economic background of Dominion-Provincial relations. He was requested to include a review of the economic history of Canada with particular attention to the national economic policies which have influenced it, a description of the major regional economies and of their relationship to one another, and an examination of the economic characteristics of Canada and its chief regions which are of particular significance to public finance. This study was planned to throw light on the opening and most general instruction given the Commission in its terms of reference, viz., "That it is expedient to provide for a re-examination of the economic and financial basis of Confederation and of the distribution of legislative powers in the light of the economic and social developments of the last seventy years."

In view of the basic importance and extreme complexity of the subject, Professor Mackintosh was assisted by a number of the leading Canadian authorities in the field. These included, in connection with the regional studies, Dr. Henry Laureys of Montreal, Professor W. J. Waines of the University of Manitoba, Dr. S. A. Saunders, A. N. Reid, and Professor Robert McQueen of the University of Manitoba, and in connection with the general studies, Professor George Britnell of the University of Saskatchewan, Professor D. C. MacGregor of the University of Toronto, J. R. Rutherford of the Dominion Bureau of Statistics on national income, R. A. C. Henry on transportation, and Professor F. A. Knox of Queen's University on monetary policy. Mr. J. J. Deutsch acted as Professor Mackintosh's chief assistant. Separate studies have been made by several of the foregoing on their individual topics, and are being produced independently. In this study the method of presentation and any expression of opinion are solely the responsibility of the author, and not of either his colleagues or of the Commission.

Professor Creighton's study on British North America at Confederation serves as an introduction to the following work, and Professor Mackintosh consequently opens with a very brief review of the economic circumstances of the British North American colonies at Confederation, and of their relation to a world entering a new age of "free trade and steel."

Professor Mackintosh then proceeds to outline the basic national decisions which were made in the two decades following Confederation and which determined the framework within which the economically isolated colonies were to build an integrated nation. The settlement of the prairies, the provision of an all-Canadian transportation system, and finally, the adoption of a protective tariff policy are shown as major and related elements of policy in the structure of the Canadian economy.

The development of Canada within the framework of these national policies is then recounted. Checked by the Great Depression of the seventies, eighties, and early nineties, a change in world circumstances finally made possible the great expansion following 1895 which had been anticipated by the early planners. The expansion is analyzed in some detail and is shown to have consisted of the greatly magnified development of specialized export regions coupled with the complementary growth of integration, interdependence and specialization within the economy. Inter-regional trade increased greatly, enormous investment was made in transportation and other capital equipment, and metropolitan centres grew significantly. Some areas, however, with declining exports, failed to integrate themselves with the expanding export regions and participate in the general growth.

War demands brought a continuation of expansion along much the same lines. They accelerated the rate of growth of the Canadian economy to maturity, but also gave some misdirection, and postponed adjustments which were necessary, and which delay seriously aggravated. This chapter concludes with a review of the development of the railway and tariff policies during the period, and a brief inventory of the national economic position at the close of the war.

The sharp but short depression of 1921 was followed by a process of apparent readjustment which, Professor Mackintosh notes, did not really overcome but only temporarily concealed some of the underlying vulnerabilities. The stage was set, however, for large scale participation in the world boom which culminated in 1929, and the coincidence of strong demand for the chief Canadian exports, large crops, and easy credit raised the national income to a high level. All regions were not equally favoured, and Professor Mackintosh reviews the position of each at this time, and also notes the regional implications of some of the particular trends of the period such as the further growth of metropolitan centres and the shift of employment to the service industries. The evolution of tariff and transportation policies and their general influence are also described. The stimulus of these policies was not limited or clearly definable; nearly all industries in some areas, and some industries in all areas, benefited, but at the expense of new burdens and rigidities which could only be borne comfortably by a strongly rising income. The basis of the general prosperity was precarious, however, depending on the maintenance of a large volume of specialized exports of which the chief, wheat and newsprint, were already in weak positions, and on a high rate of capital investment. On the other hand heavy fixed charges had been built up. The Canadian economy, as a going concern, had capitalized and mortgaged itself generously and optimistically.

The world depression, long-deferred adjustments, and an unparalleled western drought then struck simultaneously. The extent to which the exposed raw material exporting regions had to absorb the full brunt of these blows, intensified by the operation of some Dominion policies, is shown in the provincial income figures. Whole areas were impoverished and extensive inter-governmental fiscal transfers were necessary to prevent a complete collapse.

Professor Mackintosh proceeds to examine Dominion tariff, transportation, and monetary policies, not to pass on their merits, but to record their differential regional effects.

The importance of the tariff in building up an integrated Canadian economy is shown. In discussion of its regional effects he notes the basic distinction between its incidence on a previously established exporting area, such as the Maritimes, and

on an exporting area, such as the prairies, which developed under the relatively stable rates of 1879 to 1930. Since it is changes in the tariff, rather than its existence, which affect industries and regions differentially, Professor Mackintosh analyzes in detail the major 1930 tariff revision. He finds that the increases may have helped to maintain employment in the industrial provinces, but reduced real income by an incalculable amount in the export regions.

In conclusion Professor Mackintosh summarizes the significant features—from the viewpoint of Dominion-Provincial relations—of the Canadian economy; the distribution of resources and the application of techniques which have created a number of highly specialized export areas with characteristically wide fluctuations in income; the complex, integrated, and interdependent division of labour which has been developed within the framework of national policies; the heavy fixed charges which the economy has incurred; the probability of a flattening out in the rate of expansion which will leave less margin for waste and errors in the future; and the corollary of this economic background that the maintenance of government activities on their present scale will require large inter-regional transfers of income at times.

Professor Mackintosh expresses no opinion on whether these transfers of income should be inter-governmental or made directly through the Dominion's fiscal system.

The first draft of this study was completed in August, 1938, and after having been circulated to the Dominion and provincial governments for comment, was revised where necessary and put in its present form in the spring of 1939.

THE ECONOMIC BACKGROUND OF DOMINION-PROVINCIAL RELATIONS

Chapter I

THE ECONOMIC CIRCUMSTANCES OF CONFEDERATION

1. Fundamental Considerations

There are certain generalizations concerning the development of new countries which must be borne in mind in interpreting the economic history of Canada. In the first place, rapid progress in such new countries is dependent upon the discovery and development of cheap supplies of raw materials by the export of which to the markets of the world the new country may purchase the products which it cannot produce economically at that stage of its development. Such supplies are invariably obtained by the exploitation of natural resources. In the second place, rapid development is further dependent on the ability of a new country to borrow capital abroad and to adopt also technical knowledge and equipment developed in older countries. Without such borrowings and adoptions, progress is inevitably reduced to the slow pace of domestic accumulation of savings and the development of local inventions. Particularly in a continent such as North America, the greater part of whose resources lie in the interior remote from the sea, the adoption of European inventions and improved methods of land and inland-water transport is of the greatest significance. Abundant resources without transportation facilities to make them available to world markets are of little value.

There is, under these circumstances, a strong and natural inclination on the part of a new country to borrow extensively and thus build up heavy debt charges. Since incomes derived from the export of raw materials are notoriously variable, the economic difficulties in which new countries so frequently find themselves are those that occur when fluctuating incomes are coupled with the rigid expenditures occasioned by heavy debt charges. When, as is so frequently the case, an attempt has been made to cheapen the cost of borrowing by lending the credit or guarantee of the government or by the government itself making the necessary expenditures for improvements, economic difficulties find their reflection immediately in the financial difficulties of government. Pioneers are by necessity and selection sanguine people. They are prone to take over-optimistic views of the effects of such community investment on future income and to assume that government guarantees may be given at no cost. The proposal of a government guarantee means simply that the community through its government estimates the risk of the enterprise to be lower than does the private investor. Since government debts ordinarily lack even the slight flexibility which proceedings in bankruptcy and reorganizations give to private and corporation debts, the assumption by governments of such debts increases the rigidity of the burden on the economy.

One final consideration must also be borne in mind. The rate of expansion in new countries, as in others, is profoundly affected by major improvements in productive equipment, practices and organization. Such changes may increase the rate of expansion by making hitherto useless resources highly valuable, or by cutting the costs of transportation and so making new markets profitable. In contrast, they may be a drag on expansion by enhancing the advantages of some competitor country. The period of Canadian Confederation was a period in which the railway, the steamship, and the new iron and steel industry affected profoundly the fortunes of the uniting colonies.

2. The Physical Conditions

The geographical basis of Canadian economic life is too well known to require recapitulation. There are, however, some significant features which should be borne in mind. The separation of the five economic regions of Canada from one another by distance and by physical barriers has its counterpart in the high cost of transportation which is the economic obstacle to inter-regional trade. So great was that separation that, prior to Confederation and the railway era, inter-regional

trade was very small, the trade in flour and coal between the Province of Canada and the Maritimes being the most significant part.

Of great importance also is the access which the St. Lawrence-Great Lakes system gives to the northern Mississippi Valley. That inland waterway, linked to New York by canal and rail, has had an importance for the United States perhaps greater even than it has had for Canada.

The Canadian Shield, lying as it does between the St. Lawrence lowlands and the prairie region, has been at times a decisive factor in the Canadian economy. The barrier which it opposed to rail transportation and the lateness of the exploitation of its resources made it, for many years, an obstacle in the path of economic development. Its existence meant that the most economical location for a railway between the St. Lawrence Valley and the prairie region, both from an engineering and a traffic standpoint, lay south of the Upper Lakes. Its existence meant also that the natural path for industry to follow on its progress from east to west behind the moving frontier of settlement was through the United States.

The position of the region of British Columbia on the Pacific coast behind a mountain barrier which opposed high altitudes and immense engineering difficulties to rail transportation, gave rise to a series of peculiar problems. It was not until the opening of the Panama Canal that British Columbia experienced the rapid development which comes from increasing access to world markets and a great extension of the hinterland tributary to its metropolitan centre. Prior to that time the main stimulus to expansion had come indirectly through the prairie market.

3. The World Circumstances

The period in which Canadian Confederation was generated and developed was one of rapid change in world history. It has been characterized by J. H. Clapham as the age of "free trade and steel." On the one hand, by the repeal of the corn laws, the navigation laws, and similar legislation, Great Britain gave up her old imperial policies and prepared to withdraw from many of her imperial obligations. Deprived of the preferential treatment of the old Imperialism, the British North American colonies sought readjustment to a changed world by means of a reciprocity treaty with the United States. Following Britain's lead, other nations revised their trade policies and from 1860 to 1880 the world achieved an unprecedented freedom of trade.

On the other hand, the simple economic life, which was based on the older industrial techniques, felt the impact of the new instruments of industry and transport. The colonial economy of the first half of the 19th century had been based on wood, wind, and water while that of the second half was to be established on steam, rail, and steel. The vast technical transformation thus brought about gave rise to many problems for colonial countries, problems of new markets, new competitors, the search for new products, and of capital imports and mounting debts.

The condition of depression and contraction in which the period opened gave way at the beginning of the 50's to a new wave of prosperity. The flow of Australian and California gold brought in succession lower interest rates, an outpouring of British capital to seek more profitable investment in new areas, and higher prices, while the new railway equipment which England had tried out in the 40's was adopted with great rapidity, both in Europe and America. The Crimean War and the fortuitously low yields of the European crops gave an extra advantage to agricultural exports. America participated with the rest of the world in a great investment boom which in America was more specifically a railway and settlement boom. In it the British North American colonies shared to a high, though uneven, degree because of the Reciprocity Treaty and the building of the Grand Trunk. Over-investment and financial strain brought the crisis of 1857, but on the whole the years of depression were short and prosperity was soon recaptured.

The American Civil War and particularly the boom which followed in the reconstruction period after the war were important factors, not only in the world situation but in the particular circumstances in which the British North American colonies found themselves. The sharp crisis of 1866 was but a temporary halt in a major expansion which culminated in the crisis of 1873.

4. The British North American Colonies

An extended description and analysis of the circumstances out of which Confederation developed is given in the study by Professor D. G. Creighton, *British North America at Confederation*. It is necessary here only to emphasize certain economic factors which throw light on the subsequent course of development.

The colonies shared in the world expansion of the 1850's. High prices enabled lumber and wheat from the Province of Canada to overcome trans-

portation barriers and reach European markets while the Reciprocity Treaty opened the booming market of the United States. The Maritime exports of lumber, fish, coal, and agricultural produce likewise found wider markets and higher prices.

Money was cheap and the railway was proving a revolutionary instrument for the opening up of continental interiors. Originated in England it had a much greater role to play in America. The Grand Trunk was a Canadian project designed to supplement the St. Lawrence route and to tap the traffic of the Mississippi Valley. Through the European and North American Railway, the Maritime Colonies hoped to draw traffic from the New England States. Both were bold projects and involved all the colonies in heavy government expenditures and heavy debts.

Though basic raw-material production still dominated, diversification of industry began and manufacturing developed, particularly in Canada West and Montreal, beyond the simple flour, lumber, woollen mill and distillery stage. A protectionist interest arose although A. T. Galt linked his tariff of "incidental protection" to government expenditures for the improvement of transportation. He represented it as a fiscal device by which the government, which had obligated itself heavily in the St. Lawrence canals and was assuming additional obligation for the construction of 2,000 miles of railway in the 1850's, could capture some of the gains which came to exporting groups through raised export and lowered import prices.

In British Columbia and Vancouver Island, on a smaller scale and in simpler pattern, the same processes were at work. The gold rushes culminating in the Cariboo were the occasions for expansion, rapid increase in population, heavy expenditures on internal improvements, and, in relation to the scanty population, enormous government debts.

In this expansion each colony had developed its own exports, planned its own transportation and settlement projects, and with the aid of the British government done its own borrowing. Intercolonial trade had been so small as to be of minor importance. The colonies were economically separate and isolated units though they faced common problems in railways and had common interests in access to the United States market; to some degree they had complementary resources.

Prosperity continued into the 1860's but it was less widespread and more variable. Population increased more slowly for the supply of new agricultural land was exhausted. Not until the next century were relative increases greater than those of 1851-1861 to be experienced.

Percentage Increases in Population

	1851-1861	1861-1871
Prince Edward Island	29	16
Nova Scotia	20	17
New Brunswick	30	13
Quebec	25	7
Ontario	47	16
Canada	32	15

Chapter II

BASIC NATIONAL DECISIONS

1. The Position of 1867-1873

At the outset the Dominion, though united politically, was economically made up of two groups of provinces, isolated from each other and lacking common economic life though sharing some common problems. Cast adrift twenty years earlier by the adoption of free trade in Great Britain, they had been rescued for the time being by rising prices, a high rate of investment, and by the United States market available to them through the Reciprocity Treaty. Now, without the benefit of that Treaty, they were fearful of the results of the loss of the United States market. New Brunswick and Central Canada had sent there exports of sawn lumber; Nova Scotia had sent coal and fish; and Central Canada had found sale for much agricultural produce.

The ambitious canal and railway projects which were expected to tap the main streams of United States trade had palpably failed. The Grand Trunk did not even get entrance into Chicago until 1880.

The great attempt to gain prosperity through transportation facilities had loaded the new Dominion with a heavy debt. In 1867 the gross national debt was $93,000,000 and the net debt $76,000,000 or $21.87 per capita. Prior to 1867 the total government expenditures for canals, harbours, and railways had been not far short of $200,000,000. The sharp crises of 1857 and 1866 had given warning of the variability of export prices, of the abruptness with which small colonial governments with pressing obligations could be shut out of the money markets, and of the lack of stability of government revenues derived almost entirely from customs duties.

As Canadians looked across the border at the United States they saw rising prosperity historically associated with the moving frontier of settlement; active settlement, it was clear, meant active investment, both on the frontier and in the older settlements and coast cities. When in 1867 they looked at their own Dominion they saw that the frontier of settlement had all but disappeared, the desirable agricultural land was completely occupied, and already there were signs that the area of new settlement for Canadians in the next two decades would be found across the Detroit River. Progress and development, as the colonists knew them, were balked by the international boundary and the Canadian Shield. A population increase of 32 per cent, 1851-1861, had been followed by a meagre increase of 15 per cent, 1861-1871.

From the point of view of economic development much was hoped from Confederation.[1] It was expected that the whole, economically as politically, would be found to be greater than the sum of its parts. A larger unit of government promised broader financial resources and the greater borrowing power necessary to carry out still more ambitious railway policies. It was hoped that the new Dominion would in some measure find within itself a circulation of trade which might compensate for the loss of free access to the United States market. This hoped-for integration within a national economy—a strengthening of internal trade to replace weakened external trade—found expression in the repeated references to interprovincial trade. It must always be borne in mind that the economic model to which Canadians looked was the United States and there they had seen a great internal expansion facilitated by canals and railways and expressing itself in widening frontiers and growing towns and metropolitan centres. As a great hinterland opened up, the rival Atlantic cities grew in size and wealth at unbelievable rates.

It was this type of expansion for which citizens of the new Dominion hoped and it was this which spelled for them prosperity. And yet they were painfully aware that the new Dominion was very small, that the possibilities of its markets were meagre, and that the hopes for specialization and integration within it must necessarily be narrowly limited. Of escape from these narrow limitations there were but two possibilities—either a renewal of reciprocity with the United States which would permit an integration with that growing market, or the development of a new Canadian frontier through western expansion.

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[1] See D. G. Creighton, *British North America at Confederation.* Section VIII.

It was fairly clear also that within the new Dominion structure there were potential elements of conflict. It had been already seen that the interests of the Maritime Provinces and of Central Canada were by no means identical in the matter of railways. The most ambitious Maritime railway scheme had been that of the European and North American which was to be a link with the New England States. The Confederation alternative was the Intercolonial, and how far it would be effective in carrying Maritime products to the Central Canadian market was a matter of some doubt. There was a threatening disparity in the views of the Maritime Provinces and of Central Canada on the tariff. It was not improbable that in the future the compromise of 1866 would disappear. It was not apparent in 1867, but it was inherent in the facts of development, that as metropolitan centres grew up there should emerge serious conflicts between regional centres and those which extended their influence over the whole Dominion.

2. Prairie Settlement

In the period in which Confederation was planned and worked out, there were three decisions looking toward economic integration within a national economy—decisions which were so broad in scope and so important in effect that they continue to mark the main lines of national policy. Though they have been modified and recast from time to time, they can in their essential form be accepted as major facts in national economic development.

The first of these decisions which was arrived at slowly between 1857 and 1869 was to acquire the British territory of the great central plain (Rupert's Land and the Northwest Territory) as a Canadian frontier region. This decision which originated in the old Province of Canada was part and parcel of the Confederation plan but was not made effective until the new Dominion had been formed. Though it had political aspects of major importance its economic significance lay in the design to give to the new Dominion, hemmed in between the United States boundary heavily fortified by the Civil War customs duties and the unfriendly barrier of the Pre-Cambrian Shield, a region of frontier settlement capable of rapid development and capable in turn of stimulating development in other parts of the Dominion. This was to be the counterpart of the stimulus which the settlement of the Mississippi Valley had given to the economic development of the United States. The new frontier region was to be tied to British Columbia on the west and to the Central and Maritime Provinces in the east. It was thus to serve as a link as well as an economic stimulus. Its acquisition not merely implied enlarged inter-provincial trade but a great expansion which would permit integration of the type that was to be observed between the rising metropolitan centres of the United States and their hinterlands.

From the point of view of settlement the Hudson's Bay purchase was a distinct experiment. The evidence before the Select Committee of 1857 had on the whole favoured Sir George Simpson's contention that the western plains were unfit for agriculture. The hope for success was based largely on the rapid movement of the United States settlement into the great plains region.

The Hudson's Bay purchase was a major contribution to the building of the Dominion. "In truth," writes Chester Martin, "the transfer of 1870 marked a revolution . . . in the very nature of the Canadian federation. It transformed the original Dominion from a federation of equal provinces, each . . . vested with its own lands, into a veritable empire in its own right with a domain of public lands five times the area of the original Dominion under direct federal administration."[2]

It was significant of the national purposes behind the Hudson's Bay purchase that the public lands of the new territory were to be "administered by the Government of Canada for the purposes of the Dominion." Of these "purposes of the Dominion," two transcended all others—railways and settlement. Those public lands were to provide the railways which would link the scattered regions of the Dominion and were to encourage the settlement which would in turn support the railways and give stimulus to the older regions. In 1929 it was officially declared that these "purposes of the Dominion" had been fulfilled and the process of returning the remaining public lands to the Prairie Provinces began.[3]

These declared "purposes of the Dominion" make clear the nature of the decision for the settlement of the Prairie region. They indicate also what contribution the new frontier of settlement was expected to make toward the reviving of investment and the enlarging of the economic circulation within the country.

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[2] Chester Martin, *Dominion Lands Policy,* in series "Canadian Frontiers of Settlement", Vol. II, (Toronto: 1938), p. 223.
[3] *Ibid.*, p. 228.

3. All-Canadian Transportation

The first decision implied a second—a new transportation policy. It implied the construction of a transcontinental railway. When this second decision, however, was finally given form it was not merely for a transcontinental railway but for all-Canadian routes of transport. This decision meant that costs of construction were increased and that larger participation by the government would be necessary.

The construction of a transcontinental railway system was like the former decision essentially a part of the Confederation plan.[4] Aside from the promise of the Intercolonial to the Maritime Provinces and a specific undertaking to British Columbia for the construction of the Canadian Pacific Railway, the very existence of the Dominion implied the development of transcontinental transport. To British Columbia, then mired in the gold rush *débâcle,* transcontinental transportation opened an era which has continued to the present to be largely moulded and dominated by transportation costs. Economically the Canadian Pacific Railway project was another phase of the plan to unite and integrate the separate regions into something approaching a British North American economy.

The new transportation policy represented a new strategy of transport. The era of the St. Lawrence-Grand Trunk project was over. Though enormous costs had been assumed it had failed to tap the Mississippi Valley. It is significant that in 1862 Edward Watkin, coming to Canada to form plans for rehabilitating the almost bankrupt Grand Trunk Railway, developed a project for building the Intercolonial Railway as an extension of the Grand Trunk to the Maritime Provinces and for undertaking a transcontinental expansion to the Pacific. It was a time when westward extension of railways was popular, for the Union Pacific was chartered in 1862 and the Northern Pacific in 1864. Watkin's project, which came to nothing, was an indication of the new railway strategy—the projection of all-Canadian routes, the development of a broader Canadian hinterland.

Government participation in transport investment was already an established tradition. The facts of the new projects made it even more necessary than before. When finally the contract for the Canadian Pacific Railway was made, it was generally agreed that the government contribution by land and cash subsidies and by protective privileges was necessary to induce the construction of the road entirely through Canadian territory. A substantial part of the cost of the new transportation policy was accepted as a national overhead and so it was with later railway projects. The forms of government aid and government obligation changed with shifting conditions and changing financial fashions, but the acceptance of a large portion of the cost of all-Canadian transportation routes as a national overhead cost has persisted to the present. That acceptance carried with it the unequal allocation of those overhead costs to the regions of Canada through the structure of railway rates, a structure determined in part by policy but mainly by uncontrollable economic circumstances.

The older transport strategy was not entirely given up but it was relegated to a subordinate place. The Grand Trunk Railway finally gained access to Chicago in 1880. The St. Lawrence canals have been continuously improved and deepened.

The full significance of the decision for all-Canadian transportation routes and its relation to other national policies will not be fully appreciated unless it is remembered that the period in which the decision was taken was the one in which the railway was the major instrument of economic expansion and that the continent of North America, with its meagre coastal plains and vast interior basin, was the one on which railways have played their greatest role.

The transportation policy was designed to harness this great new instrument of economic expansion to the task of developing a Canadian national economy which, while still tied to world markets, would have some unified life and circulation within itself.

4. Anticipations

What was hoped from these new policies can be indicated by quoting from the Budget Speech of Samuel Leonard Tilley on April 1, 1873. In justifying the proposal of ambitious expenditures of $10,000,000 on the Intercolonial, $30,000,000 on the Pacific Railway, and $20,000,000 on canals, he referred to the great benefits which would come to all parts of the Dominion as a result of these national investments. "Coming further east still, let us but have our canal system completed, our connection with the Pacific Railway at the head of Lake Superior, the Northwest becoming rapidly settled, the exports of the settlers passing through our canals and the whole system of the Ontario railways complete, and the result will be that the trade of the city of Toronto which has doubled in

[4] See D. G. Creighton, *British North America at Confederation.* Section IX.

five years will be quadrupled, and the case will be the same with Hamilton, London, and other cities in the West. Such will be the direct and indirect results of these great facilities, and is it unreasonable to suppose that there will be increased ability to contribute to the revenues of the Dominion?" Similar benefits were to accrue to the other provinces and in all of them increased trade and increased investment would provide sources from which the Dominion government could recoup itself for its investment.

5. Industrialization by Protective Tariffs

The third decision was reached more slowly and with more hesitation. It had not, like the other two, been forecast at Confederation. When the so-called National Policy was translated into law in 1879 a definite decision was taken for the promotion of industrialization within Canada through the means of protective customs duties. This decision has been the subject of much controversy and has been frequently attacked. It has, however, never been reversed nor indeed very seriously modified. Our concern here is not with the justification or merit of the decision, nor with its origin, but with its important implications for the development of a Canadian national economy.

An earlier version of a protective policy had been experienced in Central Canada under A. T. Galt's "Incidental Protection," under which the main list of dutiable imports was taxed at the rate of 20 per cent. His justification of his policy was significant. Because of government expenditures on the improvement of transportation by land and water, producers' prices of exports had been increased and consumers' prices of imports had been decreased. It was, he said, desirable that, through higher customs duties, part of this national gain should accrue to the government to meet the debts which it had incurred, that part should go to the local manufacturer to offset in part the lowering of his natural protection, and that the remainder only should go to the export producer.[5] The relation which Galt emphasized between fiscal policy and transportation policy and the relation also to a program of industrialization are significant.

To make Confederation possible the tariff of Central Canada was reduced in 1866 so that the main list of dutiable imports on which 20 per cent had previously been imposed was now subjected to 15 per cent duties. This was a distinct change in policy and was represented so by A. T. Galt, the Finance Minister, in his Budget Speech. "The policy of this country has been to make every article of natural production imported into the province free and for revenue purposes to impose duties on all those manufactured articles which it was thought were able to bear the burden, affording at the same time an incidental amount of protection to our own manufacturers. Now we propose to decrease the duties on the largest class of manufactured goods entering the country and to take them off altogether from those articles which, to a great extent, enter into the manufacture of other articles in this country." He represented his earlier policy as temporary. "And I hope the day will come, notwithstanding the sneer of the honourable gentleman, when he as Finance Minister, or someone whom he can support, may be able to make a clean sweep of all customs duties on manufactured goods."

The purpose of this change of policy was made clearer by Sir John Rose in his Budget Speech of April 28, 1868, " . . . our desire is to make as few changes in the tariff as possible. We desire that these should be in the direction of conciliating our friends in the Maritime Provinces, and, further, we desire not to restrict our intercourse with the United States at the present moment . . . We propose to take the duty off flour, meal, grain, and breadstuffs of all kinds. (Hear! Hear! from Nova Scotia members)"

Examination of the Census of 1871 reveals that Canada had made some progress along the path of industrialization. Few of her important industries were, however, dependent on the very slight tariff protection of those days. When measured according to the number of employees, about 12 per cent of the industries listed as manufactures were obviously of the naturally sheltered type —shopcrafts and local services not exposed to external competition. About 43 per cent were industries carrying on the initial processing of domestic raw materials. Saw-milling constituted one-half of this group. While some duties were imposed on imports of these products, these manufacturing industries were with slight exception quite independent of tariff protection. The remaining manufacturing industries, including 45 per cent of all those employed in manufactures, embraced also certain sheltered industries, though less obviously so, and others dependent on the home market and subject to foreign competition. Their relation to the tariff can be studied in the following table:—

[5] *Sessional Papers of Canada*, 1862, No. 23.

Table 1

Manufacturing (Other than Domestic-Raw-Material Processing and Obviously Sheltered) Industries, Canada, 1871

Imports Relatively Large

Industry	Employees	Tariff Rate*
Sugar Refining	359	44%†
Wool Textiles	4,464	15%
Cotton Textiles	745	15%
Hardware and Tools	573	15%
Rolling Mills	762	.5%
Iron Smelting and Steel	624	Free
Paper Factories	760	15%
	8,287	

Imports Relatively Small (less than 10% of production)

Industry	Employees	Tariff Rate*
Tobacco Working	2,216	50%†
Boots and Shoes	18,719	15%
Saddle and Harness Making	2,667	15%
Clothing	17,123	15%
Agricultural Implements	2,546	15%
Boilers, Tanks, and Engines	1,265	15%
Railway Cars (parts imported)	175	15%
Foundries and Machines	7,653	15%
Carriage Making	4,849	15%
Furniture	4,366	15%
	61,479	

Total Listed 69,766
Total in Group .... 87,081 = 45% of employees in all manufacturing.

*Simply the tariff rate and not the rate of protection on conversion costs.
†These rates are in part compensatory for high revenue duties on raw materials.

It will be noted that of the manufacturing industries in which imports were large relative to domestic production, only the woollen industry employed a considerable number of workers. Here it is probably true that the products of the small local woollen mills did not compete directly with the imported woollen textiles which were products of different types and qualities. By far the greater number of employees are to be found in those manufacturing industries where imports were relatively small and where competition from abroad was negligible. Some of these industries were little more than shopcrafts and were probably of the sheltered type. Some, turning out heavy and bulky products, were protected by transportation costs, and in others cheap British materials made possible low costs of production.

Though the colonies in 1866 had faced a threatening outlook, the years immediately following Confederation were bright with rising prosperity. The Civil War in the United States was followed by a reconstruction boom which was topped after 1870 by what Europeans of the day called "the Prussian Boom." Prices and business activity reached a peak in 1873 and, with the Vienna crash in May of that year, there began the period to which the generation before our own had given the name of the Great Depression.

That depression was most characteristically marked by a great and persistent fall in prices, and marked also by severe stringency in the money market following extravagant over-investment, particularly in railways. New countries such as Canada were, however, in relatively favourable positions. Because of great reductions in the cost of transportation and in the cost of production of British manufactures, the prices of their imports fell more rapidly than those of their exports and throughout the whole period the terms of trade changed favourably. The most serious effect of the depression was that capital markets were tied up and the great investment projects, such as that of the Pacific Railway in Canada, had to be postponed or curtailed.

Though imports and customs revenue were fairly well maintained until 1875, increased expenditures and inability to borrow forced the Canadian government to raise the customs tariff in 1874, the 15 per cent list being increased to 17½ per cent.

Lumber exports suffered and agricultural districts dependent on the lumber industry were depressed. In the main, however, the depression was commercial and fell particularly on the distributive trades which were harassed continuously by the problem of holding inventories under falling prices. It was not until after 1875 that the full severity of the depression was felt in Canada and then it was intensified by crop failures.

Current views on a protective tariff and on the industrialization of the country are revealed in the evidence before the Select Committee of 1876[6] Witnesses appearing before the Committee were

[6] *Appendix (3) to the Journals of the House of Commons, Canada, 1876.*

surprisingly in agreement. The most desirable of all conditions was unrestricted reciprocity with the United States. If, however, the United States market was to remain closed to them, most of them favoured protection in the home market. If access to the United States market was possible, they were confident that with increased specialization they could compete profitably, but if restricted to the home market they could not share it with others.

The fundamental facts apparently were that United States industry had not yet reached its later stage of mass production. Its costs had been raised substantially by the high protection inherited from the Civil War period and industry generally was handicapped by the high costs of iron and steel. The Greenback period had left also an inheritance of inflated labour costs. Great Britain was the great industrial country and imports of iron and steel from Great Britain gave many Canadian manufacturers a distinct advantage over those of the United States. In milling, in the boot and shoe industry, the agricultural implement industry, and in the manufacture of steam engines and foundry products, competition from abroad was not a serious problem. There were heavy imports in woollen knit goods and woollen cloth from Great Britain and in cotton textiles from the United States, but the manufacturers were confident that, with access to the United States market, greater specialization and the advantage of cheaper English machinery would enable them to compete profitably. Aside from the report of the Committee itself, the evidence of witnesses makes clear that the protective tariff as an instrument for industrialization was only a second best to unrestricted reciprocity with the United States.

The tariff introduced in 1879 was, of course, like all other tariffs a result of diverse pressures and interests. The legislation, however, from a long-term point of view represented a decision to promote industrialization in terms of a Canadian rather than a North American market. Hope for reciprocity had faded and the government, with electoral support, decided to increase drastically the protection afforded by the customs tariff. The new protection given was widespread. "We have endeavoured," said the Finance Minister, "to meet every possible interest."

The previous tariff (1874) had been a simple one. Almost all rates were *ad valorem*. Primary products were free; semi-manufactured goods carried rates of 5 or 10 per cent; the main list of manufactures was dutiable at 17½ per cent, and a few revenue or luxury articles were taxed at higher rates. The tariff of 1879 was much more elaborate in its classification. Specific duties were used to supplement *ad valorem* rates in the most highly protective schedules. Rates were differentiated according to the degree of processing and extended from 10 per cent on slightly processed goods to 30 per cent on finished goods. Some articles carried even higher rates.

The most important increases affected those industries for which competing imports had been large, cotton and woollen textiles, and iron and steel products. Under the previous tariff almost all textiles had been subject to 17½ per cent duty. Under the new tariff, the *ad valorem* equivalents (calculated on import valuations, 1879-80) of the new duties on individual cotton-textile items ranged from 20 to 34·4 per cent. On the major items, uncoloured and coloured piece-goods, the average rates were 27·6 and 30·9 per cent. Silk piece-goods carried a 30 per cent rate. The major woollen textile items carried rates equivalent on the imports of 1879-80 to 31·4 per cent. Blankets, which were imported only to a small extent, competed directly with the products of local mills and were subject to a rate equivalent to 41·4 per cent, while woollen dress goods, not highly competitive, were taxed at 20 per cent only.

Primary iron and steel products (furnace and rolling-mill products) had under the previous tariff been free or dutiable at 5 per cent. Under the tariff of 1879, only steel ingots, steel rails, and fish-plates were free. Pig iron was taxed 12½ per cent, iron rails and fish-plates, etc., 15 and 17½ per cent respectively, and other products in the group from 10 to 17½ per cent. The duties on castings and forgings, and boilers, tanks and engines, which, under the transportation cost and lack of standardization of the day, were sheltered, were increased from 17½ to 25 per cent. Agricultural implements moved up from 17½ to 25 per cent and machinery increased from 10 and 17½ per cent to 25 per cent, except textile machinery which was free. The most competitive nail items moved up from 17½ per cent to 30 and 32½ per cent while wire increased from 5 to 15 per cent. Hardware, in which United States imports were important, changed from a 17½ to a 30 per cent rate except that woodscrews, which the firm of Nettlefold & Chamberlain of Birmingham had been accused of dumping in Canada in 1876, were increased in rate from 17½ to 35 per cent.

The small petroleum industry in western Ontario was encouraged by a rate of 35·8 per cent on petroleum products generally, and one of 37·7 on kerosene. Manufactured gypsum was given a rate of 47·7 per cent. Salt (except British salt for the fisheries) paid 46 per cent.

Wood products carried rates ranging from 20 per cent on lumber and shingles (of which Canada was an exporter) to 35 per cent on furniture. Boots and shoes, and harness and saddlery, in which Canadian producers had almost all the Canadian market, were given rates of 25 per cent. The agricultural interest was not forgotten, though for only a few commodities could protection have been more than nominal. Duties imposed ranged from the equivalent of 9½ per cent on wheat flour to 38·1 per cent on peaches. Pork, one of the most important items for lumber and construction camps, was taxed 18·7 per cent.

Nova Scotia had its most specific share in the tariff of 1879 in the duty of 50 cents a ton imposed on coal, a duty which was increased to 60 cents in 1880. In 1887, inspired by a desire to foster an iron and steel industry such as that assuming impressive proportions in the United States and also by a desire to overcome Nova Scotian grumbling and threats of secession, the government substantially increased the duties on iron and steel. These increased duties were in addition to bounties established in 1883. Not only were rates increased (in a number of cases doubled), but many *ad valorem* rates were replaced by specific rates. The lattter gave an increasing protection as iron and steel prices fell rapidly in the next decade. The rate on iron and steel "not otherwise provided for," indicative of rates on iron and steel generally, had been raised from 20 to 30 per cent.

By 1887 the national policy of tariff protection had reached a fairly complete form, though in 1894 some reduction and readjustments were made in the iron and steel schedule. Though reciprocity with the United States was still put forward by the government as the most desirable policy (a direct offer was made in the tariff of 1879), it ceased to be a possibility of great practical importance. The protective system was firmly established in Canada.

The facts of these tariff changes have been set out in some detail in order to avoid misleading averages and yet make clear how comprehensive and great were the increases in protection in these years. The rates quoted are merely rates of duties. Free entry of raw materials and lower rates on equipment and fabricating parts and materials made the rates of net protection on Canadian processing very much higher.

It should be borne in mind that the greatly increased tariff protection set up in 1879-87, came at a period when transportation rates were falling and when rail facilities were being extended. Further, prices of imports (excluding the duty) were falling more rapidly than prices of exports. The impact of the new duties was thereby lessened. For a brief period of rising prices, 1879-83, the impact of the new high duties was great; when the decline was resumed, their effect was moderated, except for those numerous items to which specific rates applied.

This decision for industrialization by means of the protective tariff was definitely related to the settlement policy; it was to be a means by which the new market, which it was hoped would open up in the west, would be available to the other regions. The decision was definitely related also to the transportation policy for Canadian industrialization promoted the east-west traffic which was important for transcontinental railways. This is a relation which recurs from time to time in Canadian history. In a later period when the demand for tariff reduction became insistent, the policy of preferential rates on imports from the United Kingdom had the advantage from this point of view that it combined tariff reduction with a protection to east-west traffic. Still later the additional 10 per cent reduction under the British preference on goods shipped directly to Canadian ports was another phase of the same policy.

It was significant also for later history that the tariff policy had been profoundly influenced by the policy of the United States. Frequently in later periods Canadian tariff policy was to be affected by changes in the attitudes of the United States. For certain areas and certain industries in Canada the United States market has been at times all important. In contrast, changes in Canadian trade policy have usually been of slight importance to the United States. As a result United States policy toward Canadian trade has been subject to frequent and unpredictable changes and such changes have been occasions for the further promotion of a Canadian, or at times a British, as against a North American, economic integration.

The new protectionist policy intensified, broadly speaking, industrial trends already visible. It fostered manufacturing development in Ontario and Quebec on a larger scale than hitherto.

Naturally sheltered local industries were declining and were replaced by larger-scale industry protected against growing competition from the United States. The development of British Columbia and the prairie region had not gone far enough to be greatly influenced. To the Maritime Provinces, the change in tariff policy came in a critical period of transition and contraction.

The economic hopes of the Maritime Provinces in Confederation were that a larger territory and population would be made tributary to their ports and shipping, that, on the basis of their coal, local manufacturing industries would be established, and that St. Lawrence markets would be opened for their products and those which they imported from the West Indies.[7] By the 1880's it was evident there was to be but partial realization of these hopes.

The railways and steamships took away the traffic of the small ports which depended on the sailing vessels and, while Halifax and Saint John were the gainers, these larger ports competed unequally with New York and Montreal. The shipping and shipbuilding interests of the Maritime Provinces were based on the wooden sailing ship and the wooden ship had its last boom in the period during and after the Civil War. From the seventies on, it declined rapidly before the steamship and with it declined the shipbuilding and the carrying trade of the Maritime Provinces.

Both in trade and shipping, the West Indies held an important place for the Maritime Provinces, particularly Nova Scotia. In the latter part of the nineteenth century the economic position of the West Indies declined not only relatively but absolutely. In the 1880's and 1890's the decline of the cane-sugar islands was extreme. By 1880 beet sugar accounted for nearly half of the world's sugar supply and by 1900 more than two-thirds. Exports of sugar from the British West Indies were nearly £7,000,000 in 1882 and less than £3,000,000 in 1895. In so far as the Maritime Provinces were dependent on the West Indian trade, they shared in the depression of a declining area.

These changes and others were reflected in the disappearance of population increases for the Maritime Provinces as a whole and in the absolute decline of population in many parts. It is of the greatest significance that a highly protective tariff

Rates of Increase in Population, Maritime Provinces, 1851-1901

1851-61—24·6%	1881-91—1·1%
1861-71—15·5%	1891-1901—1·5%
1871-81—13·5%	

was imposed just at the time when the Maritime Provinces were seeking re-orientation of their export trade and were pressed by the difficult problems of declining populations. These difficulties did not originate in the tariff but were unquestionably intensified by its imposition.

On the other hand, the tariff did something to stimulate the development of manufacturing industry on the basis of Maritime coal, though in the main, coal moved to the St. Lawrence valley rather than industry to the coal. The iron and steel industry, including the railway-car industry, obtained a foothold and was ready for the expansion which railway construction brought after 1900. Woollen mills, cotton factories, sugar refineries and glass works were set up behind the protective tariff but, as the scale of industry increased, larger plants in the St. Lawrence valley were able to market goods in the Maritime Provinces, while only a few Maritime plants were able with profit to reach the St. Lawrence markets. The home-market industries developed were an inadequate substitute for the loss of export trade and shipping.

It is not suggested that these national decisions were taken by governments, or still less by electorates, in full consciousness of their implications, nor that the inter-relations among them were fully appreciated. They were in large measure the outcome of conflicts of interest and, to some extent, of political expediency. There is, however, sufficient contemporary evidence to show that they were related and that some, at least, of their implications were apprehended, though not at all times. The logic of circumstances was to give them a broad unity and during the subsequent course of development they were, in forms modified and extended, to be the major elements of policy in the structure of the Canadian economy.

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[7] See D. G. Creighton, *British North America at Confederation.* Section VIII.

Chapter III

A CHANGE IN CIRCUMSTANCES

This Canadian project of economic expansion and of increased integration within the country was set up in the period of the Great Depression. Circumstances had been favourable to expansion in the 1850's but in the 1870's and 1880's they were adverse.

The spectacular period of railway investment, dominated by British capital export, British coal and iron, and British engineering and promotion came to a crashing end in the crisis of 1873. Thereafter, for the next two decades, British capital turned more to home investment and to the extension and modernization of British industry. Of the reduced capital export, however, less went to continental Europe and the United States and larger fractions to Canada, the Argentine, South Africa, and Australia.[8] All over the world industry experienced difficulty in adjusting itself to continually falling prices and declining rates of investment.

On debtor countries, which were exporters of foodstuffs and raw materials, the burden of falling prices was heavy. In overseas countries, such as Canada, it was partly offset by declining costs of rail and water transportation and reduced factory prices for British manufactures. Thus, even though falling prices and the opening of new wheat lands in the United States, tapped by the new railways, ousted wheat from its dominant position among Canada's exports and forced greater dependence on animal products, the prices of Canadian exports in terms of prices of imports rose by nearly 50 per cent between 1873 and 1893. But the offset was not enough and progress was slow and disappointing.

By 1873 the area of the new Dominion was complete and by 1887, within a framework of national policies, an ambitious project of national development had been laid out. But though there was moderate growth, the expected rapid expansion of the economy and the desired repercussions and integration failed to appear. In the early 1890's neither the value nor the volume of exports per capita was higher than it had been twenty years earlier. Population increases of 17 per cent, 1871-1881, and 12 per cent, 1881-1891, were disappointing in comparison with an increase of 32 per cent in British North America during 1851-1861, and with one of 30 per cent for the United States, during 1881-1891. In the 1880's emigration from Canada to the United States (including that of recent immigrants to Canada) totalled over a million. After a brief rise during the construction of the Canadian Pacific Railway, immigration and homestead entries fell to miserable figures of 17,000 and 1,800 respectively in 1896. The returns were meagre and the costs heavy, for by 1896 the net debt of the Dominion, which in 1868 had been $22 per capita, had risen to $51. Thanks to a falling rate of interest, debt charges per capita had risen only from $1.28 to $2.07.

The record was disappointing and belied the fair prophecies with which the national policies had been launched. But about the middle of the 1890's circumstances turned favourable and the promised expansion, which was to broaden the Canadian economy and to give it interdependence and organic unity, set in.

In the great creditor countries, particularly Great Britain, rising prices and low interest rates promoted an increase in investment in all parts of the world and a renewed outflow of British capital to under-developed debtor countries. To this, increased gold output in South Africa, consequent on the application of a new technique of recovery to the ores of the Rand, and the expansion of British credit associated with the Goschen conversion of 1888, were contributing causes. The combination of rising prices (especially for foodstuffs) with low interest rates made it possible for pioneer countries, deficient in capital but rich in resources, to borrow more cheaply and to sell their exports more profitably after paying the rapidly declining transportation costs. The importation of capital provided, further, foreign exchange for merchandise imports from the creditor countries. In the ensuing period of expansion, increases in commodity prices, investment valuations, rates of investment, capital movements, and in international trade were characteristic features.

[8] W. W. Rostow, "Investment and The Great Depression", *Economic History Review*, May, 1938.

The large-scale development of the steel industry, in United States, Germany, Great Britain, and France, had made possible a new machine age, another industrial revolution, which greatly increased the demand for capital. The consequent rise in the manufacturing industries, particularly heavy industries consuming large quantities of coal, carried forward swiftly the process of industrialization which had been going on for a century. With industrialization went a rapid increase in urbanization and an increasing demand by the highly industrialized countries for food and raw materials. Though the railway era was complete in the older countries, another phase had still to appear in the newer countries.

Some economic measure of the shift in circumstances may be seen in the table which follows. The disproportionate decline in iron and steel prices meant a cheapening in cost of the most important investment goods. Thanks to increased industrialization in European countries and a revolutionary fall in transportation costs, prices of agricultural exports gained relatively. A reduced rate of interest was a further stimulus to the revival of investment in new countries. In the period of expansion which followed, the increase in agricultural prices was disproportionately large while that in iron and steel prices was small. The increases in transportation costs and interest rates in this second period, though relatively large were from so low a base as to be ineffective deterrents to the investment boom.

Table 2

Changes in Price Trends, 1872-1911

—	Percentage decreases 1872-74 to 1896-97	Percentage increases 1896-97 to 1911-13	Percentage increases (+) or decreases (−) 1872-74 to 1911-13
Prices of Iron and Steel	58 (1897-98)	11	−53
Grains and Flour	45	63	−11
Animals and Meats	31	83	+26
Dairy Products	30	67	+17
Yields on U.K. Consols	26 (1897)	39	+ 3
Ocean Freights Montreal to Liverpool	85 (1903-4)	144	−63

Canadian hopes were fixed on prairie settlement and expansion. Here certain specific factors turned favourable. After the railway had been provided, settlement was held back by high transportation costs in relation to the price of wheat, the chief plant, other than native grasses, sufficiently drought-resistant to flourish. It was held back also by the deficiency of rainfall and the short growing season characteristic of the prairie region. By 1900 the development of the dry-farming technique of summer-fallowing, and the adoption of Red Fyfe wheat had gone far to overcome the last two obstacles.[9] After 1896 the rise in the Liverpool price of wheat in the face of the continuance of the long fall in transportation costs from 1873 to 1904 removed the other. Western expansion began in earnest.

There were other forces of expansion as well. Mining developments in the Kootenay district of British Columbia, the discovery of the Sudbury nickel deposits, and the small beginnings of the pulp and paper industry added their stimulus. The Klondyke gold rush gave both a real and psychological impetus to investment.[10] But the driving force behind the new period was wheat and the wheat-growing region. It gave an economic unity to the country not hitherto experienced and built up a degree of interdependence between its different regions which was in sharp contrast to the isolation of the separate economic regions which had united in 1867.

[9] A. S. Morton, *History of Prairie Settlement,* in series "Canadian Frontiers of Settlement," Vol. II (Toronto: 1938), ch. V.

[10] H. A. Innis, *Settlement and the Mining Frontier,* in series "Canadian Frontiers of Settlement", Vol. IX, (Toronto: 1936), p. 269.

Chapter IV

THE ECONOMY IN EXPANSION, 1895-1920

Out of this conjuncture of favourable circumstances came twenty-five years of expansion such as had not been achieved before by the Canadian economy. With expansion came also greatly increased inter-regional trade and investment.

1. The Magnitude and Basis of Expansion

The magnitude of the expansion is evident even by the simplest measurements. Whereas the population of the Dominion had increased by 24 per cent from 1881 to 1901, it grew by 64 per cent in the succeeding twenty years. Nearly half of the total increase occurred in the Prairie Provinces, 21 and 22 per cent in Quebec and Ontario, 10 per cent in British Columbia and 3 per cent in the Maritime Provinces. The rates of increase were greatly above the rate for the whole country in the Prairie Provinces and British Columbia and below the Dominion rate in Quebec and Ontario. They were much lower in the Maritime Provinces, and Prince Edward Island suffered a decrease in population. The farm area of the Dominion, which had increased by less than one-third 1881-1901, expanded by 125 per cent, 1901-1921. Improved acreage increased by 130 per cent, 1901-1921, in comparison with an increase of about 40 per cent, 1881-1901. The value of field crops increased by 50 per cent in the earlier period and (with the aid of much higher prices) almost quadrupled in the second. The expansion was not, of course, uniform throughout Canada. Western competition accentuated a decline in established grain-producing areas in Ontario and Nova Scotia. The value of exports of wood and paper products was multiplied by nine. External trade per capita was multiplied by four. The last three changes noted were exaggerated by the great rise in prices but in all instances, the rise, both in dollar value and in physical quantity, was very marked.

The most fundamental single characteristic of the period was a high rate of investment induced by improved expectations of profit from the exploitation of natural resources, which had been newly discovered, newly tapped by the extending railways, subjected to new productive techniques, or converted into profit possibilities by favourable shifts in costs and prices. Overwhelmingly most important were the wheat lands of the Prairie Provinces. Prospective profitableness in the exploiting industries created markets for other industries and for a time investment fed on itself.

So high a rate of investment was made possible by a huge import of capital from abroad. In 1901, British and foreign investments in Canada were estimated to be $1,232 million; in 1921, the estimated amount was $4,906 million. During the pre-war period, it was this import of capital which made great prosperity possible and the expansion of the economy was dependent on it.

This great importation of capital, at a time when world prices were rising and when the rise was biased in favour of farm products as against iron and steel and manufactured goods (see Table 2), induced a still more rapid rise of prices in Canada. This made it progressively easier to carry the heavy overhead costs (specifically interest charges) incurred in the development of resources. While the prices of both Canadian exports and imports were rising, export prices rose more rapidly and throughout most of the period the purchasing power of Canadian exports over imports was increasing. The heavy immigration, which marked the pre-war period, contributed greatly to the mobility of labour and tempered the rise of costs and prices. Its effect did not cease, with its sharp decline in 1914, for many of the immigrant population had at that date not permanently settled. Though officially recorded as "arrived" in the pre-war period, they were only drawn into permanent occupation in the later years.

The emergence during the pre-war period of a heavy balance of merchandise imports was an indication of the high proportion of the total Canadian production *plus* imports which was being retained for consumption and capital purposes within the country; of it a greatly increased share went into capital equipment.

Table 3 sets out the main elements in the Canadian development of this period. Rising merchandise exports can be taken as indicative of the increased profitability of applying capital and new techniques to the resources of Canada, by

TABLE 3—ECONOMIC TRENDS 1900-1920

—	Merchandise Exports ($ mm.)	Merchandise Imports ($ mm.)	Current Balance on Account Merchandise, etc. (a) ($ mm.)	Interest and Dividend Balance ($ mm.)	Net Long-term Capital Movement ($ mm.)	Index of Home Investment (b) (1900 = 100)	Increase in Railway Mileage in Operation (c)	Terms of Trade (d) (1926 = 100)	Wholesale Price Index (1926 = (100	Immigrant Arrivals (e)
1900	156·0	176·5	− 4·6	− 32·0	+ 29·8	100·0	407	92·7	47·9	41,681
1901	170·2	182·6	+ 10·4	− 33·5	+ 35·1	106·6	483	94·0	48·9	55,747
1902	190·4	203·4	+ 2·4	− 34·4	+ 40·3	117·1	574	98·5	51·1	89,102
1903	201·9	251·8	− 38·6	− 35·5	+ 51·7	141·6	274	99·0	51·8	138,660
1904	176·1	249·2	− 59·0	− 38·5	+ 58·9	161·3	443	97·6	52·4	131,252
1905	205·2	263·6	− 45·2	− 42·1	+109·5	194·7	1,056	95·1	54·0	141,465
1906	254·0	312·3	− 56·3	− 45·7	+102·3	229·3	936	97·6	54·2	211,653
1907	253·8	363·0	−115·8	− 51·1	+ 91·1	272·2	1,023	96·4	58·6	272,409
1908	249·3	282·6	− 63·1	− 71·3	+218·1	263·1	520	98·5	58·5	143,326
1909	269·0	339·6	− 82·7	− 75·6	+249·4	293·4	1,138	105·2	59·5	173,694
1910	280·8	429·0	−168·8	− 82·5	+308·2	367·8	627	105·8	60·2	286,839
1911	284·1	506·3	−270·8	− 92·9	+343·4	431·6	669	103·8	62·2	331,288
1912	351·7	626·0	−312·5	−108·8	+316·1	509·6	1,440	104·4	65·4	375,756
1913	442·9	654·9	−279·7	−128·5	+541·7	509·2	2,464	88·6	64·0	400,870
1914	369·1	470·8	−123·9	−164·3	+320·6	320·8	1,491	96·0	65·5	150,484
1915	613·9	447·2	+102·9	−160·2	+234·8	111·0	4,087	100·8	70·4	36,665
1916	1,072·4	762·4	+189·8	−166·9	+201·8	131·4	2,103	88·7	84·3	55,914
1917	1,555·2	996·5	+351·8	−175·8	+ 16·2	112·5	1,384	95·9	114·3	72,910
1918	1,209·4	922·4	+ 99·8	−181·6	−135·8	132·4	− 117	93·1	127·4	41,845
1919	1,261·7	951·4	+222·2	−171·9	− 9·6	252·1	78	96·6	134·0	107,698
1920	1,267·1	1,428·7	−157·3	−166·1	+143·2	338·6	476	99·6	155·9	138,824

(a) Merchandise, gold, tourists, insurance, freight and other current items.
(b) 1900-13—A. Cairncross, *Die Kapitaleinfuhr in Kanada*, 1900-13, *Welt. Archiv.* Nov. 1937. 1914-20—Value of Construction Contracts Awarded. *Canada Year Book* (1936), p. 476.
(c) *Canada Year Book* (1931), p. 654. 1900-19, year ending June 30th, 1920, 18 months ending December 31st.
(d) Export prices as percentage of import prices. 1913-20 the export and import prices are those of the D.B.S. Prior to 1913 Taylor's indexes of average valuations.
(e) *Canada Year Book* (1936), p. 186.

reason of improvements in transportation and the shift of world demand toward the products in which Canada was gaining a comparative advantage. The response to this prospect of increased profitability was a great and rapid rise in the value of annual investment within Canada (See Table 3: Home investment; some indication of the increase in physical capital equipment is given by increases in railway mileage). Because of low interest rates in the world's money markets, capital imports contributed a large share of the total investment and provided the foreign exchange by which the heavy balance of "imports" of goods and services over "exports" of goods and services, together with the mounting external interest and dividend charges could be met. The burden of mounting debt charges and other overhead costs on the borrowing and entrepreneurial groups in the country was eased by the rising price level. So great an investment of capital would have been soon checked by rising wages and costs, had it not been for the heavy immigration of labour and the possibility of importing much of the capital equipment from Britain and the United States.

There is another aspect, discussed in other studies,[11] which should be noted here. The greater part of Dominion government revenue came from customs duties. Thus its revenues rose as imports rose. The Dominion government, particularly in its railway policy, promoted by its own expenditures increased foreign borrowing and investment and mounting imports which in turn gave rise to the "buoyant revenues" of the pre-war period. Any readjustment which changing circumstances might enforce was bound to have immediate repercussions on Dominion finance and force recourse to other sources of revenue.

Investment is induced by prospective, not actual, profitability. It is justified or condemned after the event. Specifically (because investment

[11] See S. Bates, *The Financial History of Canadian Governments.*

was based on external borrowing) the justification in the case of Canada would have been the achievement of a surplus of "exports" (goods and services) over "imports" sufficient (when capital imports were no longer available) to pay the interest and dividends annually payable abroad.

That test was approached in 1913-14. In 1913, Canada had to meet interest and dividend payments abroad of $128 million but had a *debit* balance on all other current account items of $280 million. Both, in that year, were covered by a capital import. If the capital import dried up, could the country curtail imports and expand exports to the point where its surplus of exports would be sufficient to pay the interest and dividends payable abroad? Could it do so without a great curtailment of investment involving unemployment? The turn of circumstances associated with the outbreak of war enabled Canada to meet the test with comparative ease. Canadian government borrowing from the British government in 1914 and from the London money market in 1915 and 1916 offset in part the cessation of private borrowing. A considerable proportion of imports, directly associated with development projects, ceased with the decline in investment. The dislocations in European industry focussed heavy war demands on Canada's exports and by 1915 Canada's exports were almost $200 million above the previous peak of 1913 and her surplus on current account in 1916, 1917 and 1919 was more than sufficient to meet her obligations.

Not only did the accident of the War facilitate an otherwise difficult international readjustment for Canada. The enlarged demand for Canadian products and the great rise of prices turned many an investment from a loss into a gain but for some the test was merely postponed.

2. The Expansion of the Export Industries

Enough has been said to sketch the main lines within which the Canadian economy functioned in its great period of expansion and particularly in its external relations. To understand problems which have since arisen and especially regional inter-relationships, it is necessary to indicate more specifically the direction which investment took and the transformation which it effected in the Canadian economy.

The forms into which investment flowed were manifold. Expanding industries provided markets for subordinate and contributory industries, which in turn built up markets for others. As communities grew in population and wealth, large investments were made in such national and community equipment and services as railways and public utilities, roads, schools, and other institutions. Yet it is quite clear that the focus of the great expansion is to be found in the growing export trades.

The exports which had become dominant by 1920, had, for the most part, been of minor importance in 1890. At this earlier date sawmill products had considerably more than double the value of any other export. To them all the provinces except Prince Edward Island and the Prairies contributed, but the major portion went from Ontario, Quebec, and New Brunswick to the United States and Great Britain. The former market was more important for Ontario and the latter for the provinces to the east. Cheese, the second export, was characteristically an export of Ontario to the United Kingdom. It had begun in the 70's to replace wheat as *the* agricultural export of Ontario. Fish was chiefly the export of Nova Scotia and British Columbia. Dried codfish went mainly to the West Indies, the United States, and Brazil, fresh fish to the United States, and canned salmon from British Columbia to Great Britain. Cattle, the fourth export, were shipped chiefly from Ontario, but to some extent from the Northwest, to the British market. Barley went from Ontario to the breweries of the United States but the trade was to be killed by the McKinley tariff. Base metals consisted of Ontario nickel, the discovery of which was a by-product of railway construction, and a little copper from Ontario and Quebec. Exports of Nova Scotia coal, which were small, went entirely to the United States market and Newfoundland, while fresh fruit (mainly apples) was, in large part, a Nova Scotian export to Great Britain. Furs, slightly more important than fruit, were characteristically a Northwest export.

Thus the leading exports of 1890 were primary products, though subjected in some cases to initial processing. Through them, all regions had direct contacts with world markets. By 1920 this simple picture had been completely changed. The settlement of the west had proceeded with a rapidity which could be equalled only in a grassland region where railways were built swiftly. By 1911 almost the whole of the area had been covered, though scantily, with population. Wheat and wheat flour, the products of the prairies, emerged as the great exports. Insignificant in 1890, they totalled $14 million in 1900 and had reached $279 million in 1920, a figure which had been passed by total exports only in 1910.

Pulp and paper products, new exports of the forest regions of Central Canada, the Maritime Provinces, and British Columbia to the United States market, emerged later but had exceeded $100 million by 1920. The enlargement of the United States market and the removal of the duty on newsprint in 1911, added to other favourable circumstances, had been signals for a phenomenal expansion which displaced sawmill products by more highly processed goods.

Exports of meats, at nearly $100 million in 1920, were abnormally inflated by war and post-war demands. Sawmill products were fourth in rank but the major sources were shifting. Cattle, fish, and cheese had experienced phenomenal war demands which maintained them in positions which they could not continue to hold in the next period. Base metals were virtually a new export having increased from $3 million in 1890 to $29 million in 1920. As yet they came predominantly from northern Ontario and British Columbia. Automobiles and automobile parts with an export value of $18 million were the result of a new manufacturing industry and the protection to Canadian exports afforded by preferences in other Empire countries. Exports of rubber products, leather, machinery, agricultural implements, and binder twine were lesser indications of the rise of manufacturing. They were predominantly Ontario products.

The new assortment of major exports was less equally distributed regionally than those of 1890. The Prairies stood out as the great export region, which provided an expanding home market for the other regions. Quebec and Ontario were developing, however, an export of their own of the first importance. The exports of New Brunswick and Nova Scotia and the agricultural exports of Ontario and Quebec were for the time being high but were subject to pressure from other Canadian and outside areas. The Ontario and Quebec districts could be rescued by an expanding local market but the Maritimes were in a more precarious position.

Thus the investments of the great expansion had built up a greatly magnified exporting economy, in which exporting regions were more specialized than formerly and provided larger markets for imports or the products of other regions. The dominance of one exporting region had given the Canadian economy for the first time a marked inter-dependence. Wheat was not merely the largest export and the product of a new region, it was the central dynamic and unifying force of the expansion. The fortunes of regions with declining exports depended on their ability to share in the home market, to integrate themselves with the expanding export regions.

3. Regional Investment

Export trends give some indication of the direction which investments had taken but direct investment in the export industries was not by any means the major portion of investment. What had taken place was not merely an expansion of exports but expansion *plus* a greatly extended specialization and integration within the Canadian economy. This transformation, in relation to the large increase in population, was accompanied by a huge investment in what might be called national and community equipment—harbours, canals, railways, public utilities, including telephones and central electric stations, roads, public buildings, and, in general, the equipment of municipal, provincial, and national services. Not only had there been an unprecedented increase in Canadian population and an especially rapid growth of urban areas and potential metropolitan communities, but changing modes of living and technical innovations of all sorts created enormous demands for services and the equipment which such services required.

Though the general direction of transportation policy had been indicated in an earlier period the building of two additional transcontinental railways, the filling-in of the branch-line network, both in the east and west, the thrusting of new lines into northern Ontario, northern Alberta, and the interior of British Columbia expanded railway mileage from 18,000 in 1900 to 39,000 in 1920. Capital employed in railways was multiplied two-and-a-half times. Over half this increase in mileage had occurred in the Prairie Provinces, about one-quarter in Ontario and Quebec and about 12 per cent in British Columbia.

Only a part of the capital investment of this period is recorded. Farm buildings, equipment, and live stock (not land), manufacturing establishments, central electric stations, and steam railways represented a capital investment in 1920 of $8,600 million; of this approximately $6,400 million had been invested since 1900. Central electric stations accounted for nearly $500 million, all but a negligible part of which had been invested since 1900. Railway investment at $2,400 million had been more than doubled; farm investment at $2,900 million had been multiplied by more than $3\frac{1}{2}$; manufacturing investment had been multiplied 7 times.

Though the Maritime Provinces had over 11 per cent of the population of the Dominion in 1921 they had obtained only 3 per cent of the *increase* in population, 1901-1921. In the same period they had had about 5 per cent of the increase of the farm investment, 7 per cent of that of manufacturing investment and 3 per cent of the increase in central electric stations.

The Prairie Provinces, with 22 per cent of the population of the Dominion in 1921, accounted for nearly half of the Dominion increase in population, 1901-1921, had obtained more than half the increase in farm investment but only 6 per cent and 9 per cent of that in manufacturing and central electric stations.

British Columbia, with 6 per cent of the Dominion population in 1921 and 10 per cent of the Dominion increase over the previous two decades, received 3 per cent of the increase in farm investment, 6 per cent of the increase in manufacturing and 11 per cent of the increase in central electric station investment.

Ontario and Quebec had in 1921 60 per cent of the Dominion population and had had 41 per cent of Dominion increase, 1901-1921. In the period 1900-1920, they obtained 40 per cent of the increase in farm investment but 80 per cent of the increases in manufacturing and central electric stations. Relative to population, Ontario's share of the increase in farm investment and particularly in manufacturing was much greater than Quebec's.

This great flow of investment was the result largely of public and private borrowings much of it abroad. It was developmental in object and its justification lay in the future of the country. The country as a whole, particularly the Dominion government, assumed heavy fixed charges, which were in the nature of a general national overhead. They were easy to carry (in a sense they carried themselves), as long as expansion continued and prices rose but in different circumstances their weight would be greatly increased.

4. Interdependence and Repercussions

Had the export trades and regions expended the proceeds of their sales wholly and directly on imports, the expansion would not have contributed to the economic integration of the country, however much the prosperity of the individual regions might have increased. It was because a large proportion of their expenditures was directed to home products that integration progressed so rapidly. The proportion of expenditures so directed was significantly increased by the protective duties levied on imports. The protective tariff, in so far as it rested on a basis of broad policy, deflected the demand of those drawing incomes from the export industries, to domestic rather than external products and services. While its effects, good or bad, are likely to be over-rated, it had, unquestionably, an important influence in promoting internal and inter-regional trade. Even without the tariff, however, industries naturally sheltered, by the nature of their goods and services or by transportation costs, would have found enlarged markets in the export trades and a large measure of national integration would have resulted. Railway policy, resulting in extended lines and increased facilities and in reductions in the rates applying to the major commodities moving out of and into the Prairie region (see section 7), was also an important influence in the direction of greater integration and interdependence of the various regions.

The expansion of the home market, consequent on the rise of wheat export and national policies, re-oriented a large sector of Canadian industry and induced further expansion. British Columbia's lumber industry, hitherto dependent entirely on export, became dependent for 70 to 75 per cent of its greatly enlarged market on Prairie demands. Northwestern Ontario shared the market at first but retreated before British Columbia's competition. The following table shows the expansion of those home-market manufacturing industries for which comparable statistics are available. Their expansion was to a greater extent in some cases than others dependent on direct sales to the Prairie and other exporting regions. Indirectly, however, the expansion of exports was the dynamic force behind their growth. The relation of the growth of the agricultural machinery industry is particularly direct. Iron and steel expansion was the direct result of railway and other building demands deflected by the tariff and government purchasing policy to home industry.

TABLE 4

Net Value of Production

—	1900	1910	1923
	($000)	($000)	($000)
Rubber Products	606	3,438	30,178
Tobacco	8,078	13,199	41,889
Boots and Shoes	7,623	16,000	22,958
Textiles and Textile Products	32,874	67,282	157,995
Clothing	19,960	43,657	79,470
Cotton Textiles	6,537	13,032	39,342
Furniture	4,280	8,018	16,582
Iron and Its Products	34,967	106,313	208,821
Agricultural Implements	5,469	10,667	14,434
Boilers, Tanks and Engines	2,842	7,585	2,786
Machinery	831	2,332	19,857
Primary Iron and Steel*	3,111	14,919	17,500
Railway Rolling Stock	5,178	25,221	28,008
Wire and Wire Goods	769	2,239	11,500
Automobiles	....	2,444	33,462
Chemicals and Chemical Products	3,910	12,167	56,800
Electric Light and Power	1,960	12,892	67,500
Total of above Manufactures†	94,298	239,309	602,723
Other Manufactures	120,228	325,158	701,834
Grand Total, all Manufactures	214,526	564,467	1,304,557

*Excludes iron-smelting in 1900 and 1910.

† Includes totals of textiles and textile products and of iron and its products.

The pulp and paper areas, Northern Ontario and Quebec, New Brunswick, and British Columbia, provided in the latter years of the period increasingly important markets for construction materials, machinery, electric power, and operating supplies. Workers in those industries were purchasers of consumption goods, almost none of which were produced within the immediate areas. Together with the related hydro-electric power developments, the pulp and paper industry contributed enormously to the rise of the electrical equipment industry (almost entirely in Ontario and Quebec) to the position of a major industry. The industry also provided a market in some localities for a dependent agriculture not capable of competing beyond the sheltered area.

The mining areas also enlarged the domestic market for consumption goods and were large purchasers of machinery, chemicals, explosives, and operating supplies. They provided a valuable but sometimes precarious local market for farm products and for pit timber.

All the export areas contributed to the market for transportation and distributive services. Even where goods purchased were largely of external origin, Canadian transportation and distributive services were sold with them. In some cases industries which began by contributing only to a local and sheltered market provided by one of the export industries ultimately developed sufficient competitive strength to extend sales to more distant and exposed markets. An important example was the development of British Columbian fruit growing and canning on the initial basis of the Kootenay market.

The regional pattern of the economic integration which grew up in this period can be very broadly indicated. British Columbia became a region in which the proportion of exports to total production was high; it bought somewhat more from other parts of the country than it sold to them and it was characteristically an importer of capital. In the period, 1896-1920, the importance to it of the Canadian market had increased. Of its major industries, the lumber industry found the prairie market much more important than the export market; non-ferrous metals, which predominated in the mining industry, were entirely exported; of the coal produced an important proportion was exported directly or indirectly through the smelters; the fishing and fish-canning industry had their major markets outside the Province and to a great degree outside the Dominion.

In the Prairie Provinces, the ratio of exports to the total production of the region was higher than for any other region. They became *the* export region of the Dominion. Their purchases from the rest of Canada were greatly in excess of their sales to other regions and their imports of capital both from the east and from abroad were great. In effect the people of this region used part of the foreign exchange which they obtained from exports and from capital imports to purchase goods abroad but spent the most on eastern and British Columbian goods and services. These regions were able to give the exchange so obtained, in payment for goods from abroad or, in turn, expend it on the products of other regions.

In Ontario and Quebec, the ratio of exports to total production was low while that of imports was high. Sales of goods and services to other parts of the Dominion were greatly in excess of purchases from them and the region was an exporter of capital to other regions. Within the area, however, there was great diversity. The pulp and paper and mining districts were wholly export. Manufacture for the home market (which consisted largely of the market in other regions), had greatly increased in importance. Metal, machinery and equipment industries, serving the whole Dominion, had expanded greatly. Agriculture,

though it remained through the War critically dependent on export, was turning more and more to the home market of the region's expanding industrial centres. The interest of the region in the export market was being concentrated in rather specialized pulp and paper and mining areas instead of being diffused through all the agricultural and lumbering districts. The province of Quebec, through the metropolis of Montreal, had gained more commercially, and Ontario industrially, from the opening of the west.

In the Maritime Provinces the ratio of exports to total production was high though not as high as in the Prairie Provinces and the region was an exporter of capital. The exports of the region had been maintained but had not experienced any great increase. Fish exports rose after 1900 and the expansion in the cane-sugar industry after 1903 improved the exports to the West Indies. Volume of exports, however, increased little. After a sharp rise about the turn of the century lumber exports to the United Kingdom sagged while those to the United States increased steadily but not rapidly. The industries of the region shared less than those of Central Canada and British Columbia in the expansion associated with western settlement. The iron and steel and railway equipment industries and the coal industry shared in the protectionist policy and were the chief commercial links with the rest of the country. The two former were established as large-scale industries by the railway construction boom. Coal sales increased from an average of 2,300,000 tons, 1896-1900, to 6,000,000 tons, 1911-1915. In this increase the Maritime market (predominantly the steel industry), and the St. Lawrence market, dependent on the expanding industries of Montreal, maintained fairly constant percentages while export to the United States market declined relatively. By reason of emigration to the United States and to the rest of Canada, the rate of population growth was much less than the rate of natural increase.

5. The Growth of Metropolitan Centres

A particular aspect of the growing integration of the regions of the Dominion is to be seen in the development of urban areas and in particular in the growth of metropolitan centres. In Central Canada and in the Maritimes, 1901-1921, population increases had been concentrated in urban areas and in a few newly-settled rural areas. Most rural areas lost ground. From 1901 to 1911, the period of most rapid growth in the Prairie Provinces, 60 out of the 164 counties of Eastern Canada, showed absolute decreases in population. In addition, 55 counties recorded an increase of less than 14 per cent, i.e., less than a low rate of natural increase. In other words population was moving out of at least 115 counties and into not more than 49. The 49 counties receiving population included areas of new settlement in northern New Brunswick, northern Quebec and the Lake St. John district, and northern Ontario and, most important, counties containing large and medium-sized cities. In the following decade the record was similar but less pronounced. Of 164 counties, 57 recorded absolute decreases and 40 more increases of less than 14 per cent.

Much of this loss of population was to the west but the degree to which it was also associated with the growth of large urban centres is indicated by the following comparison of provincial population increases with those of counties containing large cities:—

	1901-11	1911-21
Province of Quebec..	22%	18%
Montreal Island..	54	31
Province of Ontario..	16	16
York..	63	46
Wentworth..	41	37
Essex..	15	52
Province of British Columbia.. .. .	120	34
District 4 (Vancouver)..	241	40
Province of Manitoba..	81	32
Division 6 (Winnipeg)..	163	33

In Central Canada population was drawn away from rural areas toward manufacturing and commercial centres. The movement was less marked in Quebec than in Ontario but by 1921 both had undergone a marked transformation. In the Maritime Provinces, the area as a whole was failing to retain its natural increase and Prince Edward Island was losing population absolutely. Only in the war years did Halifax and Saint John show any differential increase.

By 1921 both Montreal and Toronto exceeded 500,000 in population and in 20 years Montreal had nearly doubled its population and Toronto's had increased by one-and-a-half times. (The increase for the country as a whole was 64 per cent.) Winnipeg had risen from 42,000 to 179,000 and Vancouver from 29,000 to 163,000 though it was in the next decade that Vancouver's big increase was to come.

These centres, particularly Montreal and Toronto, were the focuses of the economic integration of the country. In them the highly specialized banking

and financial services, and the specialized distributive services found their centres. As they developed they proved a magnet for the lighter manufacturing industries in the location of which the pull of the market was the chief influence. When the dominant export products were wheat and pulp and paper, Montreal had the advantage but as the mining industries increased in importance the advantage in respect to these services shifted to Toronto. The existence of these great centres was not based by any means wholly on provincial resources and provincial industry; they were the result of the knitting together of the entire country and as financial and mercantile markets they belong to the entire country. Other metropolitan centres, Vancouver, Winnipeg, Saint John, Halifax, were essentially regional, though Vancouver's reach was destined to be extended far beyond the provincial boundaries while Saint John and Halifax competed unsuccessfully with Montreal and Toronto in their own region. Control over their financial institutions passed to Montreal and Toronto as did a part of their distributing trade. To Montreal they lost some of their shipping.

6. The Influence of the War

Though the war expansion from one point of view was simply a continuation of the expansion which had begun in the middle nineties, it had nevertheless distinct characteristics and biases of its own. In the main, expansion continued in the same industries which had been growing rapidly in the pre-war period. War demands and limitations on competition from other countries gave an extra stimulus which carried expansion beyond the point which would otherwise have been reached in those years. To this degree it gave a bias to Canadian industry and, in terms of later readjustments, some misdirection.

Wheat-growing, in the Prairie Provinces, was greatly extended by the reduction of acreage in the importing countries of Europe, by the cutting off of Russian and Danubian exports, and by the high freight rates which discouraged expansion in Argentina and Australia. A rapidity of expansion and a degree of specialization in this export was stimulated and the industry later required severe readjustment.

The growth of the newsprint export, to which all circumstances were favourable, was speeded up by the revolutionary growth of metropolitan newspapers. Here, however, the factors bringing about over-expansion were largely post-war in origin.

The War greatly accelerated the rate of growth of the base-metal industries. Not only were increasing tonnages mined but the transition from the primitive stage of raw-material exporter to that of finished-metal producer and exporter was begun. Insistent demands for nickel, copper, zinc, and lead induced greatly increased outputs in Ontario and British Columbia. High prices permitted the enlargement of plants and extended experimentation. Though the problems of dealing with the complex ore-bodies of British Columbia and the Canadian Shield were not solved, the basis was laid for a much larger post-war expansion. On the whole gold mining which had made a promising beginning marked time during the war period. Improved techniques for the recovery of the metal were about offset by the inflationary rise of costs.

Regionally, war demands for exportable foodstuffs and lumber stimulated the agricultural and lumbering, fishing and shipbuilding areas tributary to the North Atlantic from the Maritimes to Alberta; they quickened the pace of industrialization in Ontario and Quebec; British Columbia felt some of the war demand for fish, lumber and base metals but, with the Panama Canal not yet available she was handicapped by high ocean and rail freight rates.

The insistent demands of western Europe for its own and North American manufactured products cut down greatly external competition in the Canadian home market. The war-time increase in the protective tariff was an influence in the same direction. Canadian manufacturing was greatly stimulated. The expansion was particularly pronounced in the iron and steel, machinery, equipment and textile industries. The pre-war iron and steel industry had been dependent mainly on the markets arising from the railway and settlement boom. The plants in Nova Scotia and at Sault Ste. Marie had produced chiefly railway materials while those at Montreal and Hamilton had relied on the construction and settlement booms as well. War demands took the place of these and an industry, which in 1913 showed signs of being over-extended, expanded still further. A great improvement in technical knowledge and experience took place and the metal and machine industries of Ontario and Quebec began to fit themselves in between the heavy mass-production industries of the United States and the Canadian market. The post-war years brought need for readjustment but the industries had become well established in the home market and had vastly increased their technical and industrial experience.

The war period effected also a financial transformation which was of the first importance. The London and New York markets became less and less open to Canadian borrowing, and recourse to the domestic market created Canadian financial machinery and changed Canadian investment habits. The result was to provide, in later years, the basis for home financing of Canadian industrial and government borrowings. Equally significant, Montreal and Toronto were built up as financial centres serving the entire Dominion. Not only were investment houses concentrated there but all financial services were increasingly centred there.

7. National Transportation Policy

Two sets of national policies contributed part of the framework of Canadian development, 1896-1920—transportation and tariff policies. Following the great venture of the Canadian Pacific Railway, which was not justified by results until the period of expansion began, Dominion transportation policy had been quiescent. It was not until after the turn of the century that a developmental railway policy featuring government participation and all-Canadian routes was revived on a grand scale.

The Canadian Northern Railway, from very small beginnings, had been fostered by the Manitoba government as a competitor to the Canadian Pacific Railway, and with the aid of the province had built a line from Winnipeg to Port Arthur. In 1903 the Dominion guaranteed bonds at the rate of $13,000 a mile to extend the road from the Manitoba-Saskatchewan boundary to Edmonton. In the same year, to promote "the development of Canadian trade and the transportation of goods through Canadian channels," the Dominion government entered into a much more pretentious project by agreement with the Grand Trunk Railway. The National Transcontinental, to be built by the Dominion government and leased to the Grand Trunk Pacific, was to link Moncton and Winnipeg *via* Quebec city, traversing the clay belts of northern Quebec and Ontario. It was an alternative to a Grand Trunk road from North Bay to Winnipeg or an extension from Chicago to the Canadian West which had originally been proposed by the railway. The choice of Moncton as the eastern terminus was the result of government decision, not of Grand Trunk preference, and in response to Maritime agitation for a share in western traffic and Dominion railway construction. For the construction of a Grand Trunk Pacific line from Winnipeg *via* Saskatoon, Edmonton, and the Yellowhead Pass to Prince Rupert, the Dominion government agreed to guarantee bonds up to a limit of $13,000 a mile in the prairie section and of $30,000 a mile in the mountain section. It was characteristic that the agreement stipulated that consignments were to be carried by all-Canadian routes unless otherwise specified by the shipper and the rates to Canadian ports should never be higher than rates offered to other ports.

In 1910 and 1911 further guarantees were given by the Dominion to Canadian Northern subsidiaries in Ontario and Alberta while the three Prairie Provinces and British Columbia had also given large guarantees. In 1914, when the Canadian Northern could not raise the capital required to complete its transcontinental line, the Dominion guaranteed an additional $45,000,000 of bonds and received in exchange 40 per cent of the common stock of the Company.

Here as in the earlier phases of Dominion railway policy, the country had increased the cost of its railway system by insistence on all-Canadian routes and on the linking together of Canadian regions rather than on developing the most economical transportation routes.

A third phase of Dominion railway activity was the beginning of the construction, as a government line, of the Hudson Bay Railway. It was not, however, completed until after the War.

In speaking of transportation policy as *national* or *Dominion*, one should make clear that it was so in the straightforward sense that the decisions were made by the government and parliament of the Dominion. It is not implied that national interests always or even usually outweighed regional interest. In shaping railway policies and other policies, regional pressures and regional enthusiasms had marked influence. There was no part of the railway policy but had its regional support and no error of optimism or misdirection in which regional pressure was not involved.

By 1916 the Canadian Northern, Grand Trunk and Grand Trunk Pacific were all in serious financial difficulties and following the Report of the Royal Commission on Railway Transportation, 1917, these lines were taken over by the Dominion government. Between 1903 and 1916, the Dominion government had contributed to railway construction:—

	(Millions)
By direct capital investment	$248
By loans	64
By cash subsidy	47
By guarantee of bonds (as to principal and interest)	134
And by land grants, acres	32

Though railway policy was predominantly Dominion; within their smaller spheres the majority of the provinces had been equally zealous. Motivated by the desire to build up competitors to the Canadian Pacific or to open up new areas for exploitation, they undertook heavy railway obligations. As early as 1888, Manitoba had given guarantees to the Northern Pacific to build a road from Minnesota. In 1901, in consideration of rate reductions, the government of Manitoba guaranteed bonds for the construction of the Canadian Northern from Winnipeg to Port Arthur, and transferred the lease of the Northern Pacific lines to the Canadian Northern, guaranteeing the rental. From 1909 on, Saskatchewan and Alberta gave liberal guarantees for branch line construction. Alberta had, in addition, assisted the local projects of the Alberta Great Waterways (1909) and the Edmonton, Dunvegan, and British Columbia and the Central Canada (1912-13). British Columbia in 1910 guaranteed bonds of the Canadian Northern Pacific and just before the War underwrote the construction of the Pacific Great Eastern.

In taking over the Grand Trunk, the Grand Trunk Pacific and the Canadian Northern Railways, the Dominion in fact, though not technically, relieved provinces of responsibility for the guarantee of railway securities to the following extent:—

Ontario	$ 7,860,000
Manitoba	24,390,000
Saskatchewan	17,904,000
Alberta	18,394,000
British Columbia	25,026,000
Total	$93,574,000

However fantastically optimistic or misdirected the expenditures and assumption of obligations under this railway policy may seem in the light of subsequent history, it is important to note they represent the assumption of a large proportion of the cost of linking together the regions of the Dominion as a national rather than a regional overhead.

In addition, the Dominion had made large expenditures and assumed heavy obligations for the improvement of ports and inland waterways. Up to March 31, 1922, the following expenditures including loans, guarantees, and subsidies had been made:—

	(Million)
Harbour Improvements and Dock and Terminal Facilities	$ 107
River Improvements	29
Canals	139
Railways	1,942

The second aspect of Dominion railway policy is that of rate determination and regulation as put in force by legislation and by the rulings of the Board of Railway Commissioners and the Canadian Privy Council. This is relevant to the present study in that the structure of railway rates and particularly the differences between regions are, with the respective volumes of traffic, the determinants of the shares (aside from government payment of railway deficits) of the cost of railways paid by the different regions.

A deliberate policy of promoting prairie settlement and of fostering east-west traffic was given expression in the Crow's Nest Pass Agreement of 1897. In return for a subsidy for the construction of the Crow's Nest Pass branch, the Canadian Pacific Railway undertook to reduce rates on grain and flour moving to the Head of the Lakes by 3 cents per 100 pounds and rates on a considerable list of settlers' household and building supplies moving westward from Fort William and points east by 10 per cent. Rates on fresh fruits were reduced by $33\frac{1}{3}$ per cent and on coal-oil by 20 per cent. Following the Manitoba-Canadian Northern Agreement a further reduction was made (though not as a result of Dominion policy), of 4 cents on grain and flour moving to the Head of the Lakes from Manitoba points and of 2 cents from Saskatchewan and Alberta points. Rates on westward traffic to Manitoba points were reduced by 15 per cent and those to Saskatchewan and Alberta points by $7\frac{1}{2}$ per cent. By decision of the Board of Railway Commissioners in the Western Rates Case, 1914, Manitoba rates were made standard between the Superior and Pacific territories and the former Saskatchewan-Alberta territory was eliminated. This, of course, had the effect of reducing Saskatchewan-Alberta rates from the *minus* $7\frac{1}{2}$ per cent to the *minus* 15 per cent level.

The result of these changes was to improve greatly the position of the prairie grain grower who gained both as a seller and as a purchaser. Additionally the share, per unit of traffic carried, of the railway overhead which the people of the Prairie region bore was reduced by the reduction in local rates.

Differential rail rates within the various regions of Canada are affected by three broad factors: water, U.S. rail (and later), truck competition; cost of construction and operation, in relation to traffic density; arbitrary decision and regulation by the state. As a result of these factors, maximum mileage rates in the Maritime territory were at the

beginning of the century, below those for the Central territory (Ontario and Quebec) by percentages ranging from 22 to 51 for different classifications and mileages. Water competition, rail and water competition via Portland, the short line from Montreal to Saint John, and the government-operated Intercolonial were important factors in these differentials. Comparable rates in the Superior territory were 17 to 33 per cent above the Central rates. In the Prairie territory similar rates were 50 to 76 per cent above Central rates while Pacific rates were set above Prairie rates by the use of inflated mileages for distances from Revelstoke to Canmore. By September, 1914, when Pacific rates became comparable, they were 77 to 100 per cent above Central rates. Rate changes, 1900 to 1920, reduced these differentials except for British Columbia. The Manitoba Agreement and the Western Rates judgment brought Prairie rate differentials down to 28 to 50 per cent above Central rates. Maritime rates had been increased until they were between zero and 32 per cent below Central rates.

In the rate increases which took place from 1916 to 1920 Eastern rates were increased somewhat more than Western rates.

So summary a sketch of an extremely technical subject is sufficient to indicate that in the period of expansion, 1896-1920, the position of the prairie producer of grain for export and of the whole prairie section had improved greatly with respect to railway rates. The very favourable position of the Maritimes had worsened relatively; in the decade between 1913 and 1923 Maritime class rates moved to equality with those of the Central territory. British Columbia had to await the effect of Panama Canal competition for the substantial reduction of its rate differentials.

Except in the case of the Maritime Provinces the original differentials were not to any great degree arbitrary. Competitive and market factors determined the distribution of the total railway expense. The differentials were not dissimilar to those existing on American lines. The reduction in differentials had been a matter of policy designed to ease the burden on particular regions and increase the flow of inter-regional and export traffic.

8. National Tariff Policy

The second national policy which was a factor in directing the course of national development in this period (1896-1920) was the protective tariff policy.

Several important conditions had changed since the period in which the "National Policy" was shaped. In the first place, the United States had emerged as a great manufacturing nation with a huge and highly homogeneous market within its own boundaries. Of particular importance was the rise of the United States steel industry. With immense resources of ore and coal linked by the Great Lakes, the United States had by 1890 achieved a first-class iron and steel industry centred on Pittsburgh. Prior to 1895 Canadian imports of iron and steel from the United Kingdom exceeded in value those from the United States. Thereafter the reverse was true and, by 1913, 90 per cent of Canadian imports came from the United States. The importance of this shift is not limited to the iron and steel industry. It meant that henceforth (in contrast to the position in the 70's) the most severe competition for Canadian producers in a very wide range of manufacturing industries (more specifically those using mass-production methods and steel materials), was to come from the United States rather than from Great Britain. It meant also that in an "age of steel" Canadian manufacturers were to be markedly dependent on United States iron and steel for machinery and the more specialized materials. The task of the tariff maker, already heavy because of regional differences of interest, was made still more difficult by the fact that Canadian manufacturers found it hard either to live with or without the United States manufacturing industry.

In the second place, a new region, the Prairie Provinces, had emerged as a great exporting region with a direct and obvious interest in low tariffs. Hitherto Finance Ministers had found it necessary to give special consideration to the interests of the Maritime Provinces, but now western opinion was also important and, in so far as the tariff was not overshadowed by other issues, that opinion was consistently a low-tariff opinion.

In the third place, the tariff schedules from 1879 to 1894 had, by Canadian standards, a large number of specific, in contrast to *ad valorem,* rates. In the rapid price declines from 1883 to 1896 these specific rates provided relatively growing protection. By the crude measurement of the average *ad valorem* rates of duty collected on all dutiable imports, protection had increased from 25·2 per cent in 1884 to 31·9 per cent in 1889. By 1896 it was still 30 per cent. Such averages obscured the still greater change in relation to individual commodities bearing specific rates. From 1890 on, and before

the change of government in 1896 there was a definite tendency toward "tariff reform" which was expressed in the tariff of 1894, coinciding in date with the lower Wilson Tariff of the United States.[12] Under the tariff of 1894 there were some thirty changes from specific or compound to *ad valorem* rates and a considerable number of reductions in rates. Agricultural machinery rates (as distinguished from those on tools) were reduced from 35 to 20 per cent, and a number of reductions were made in the iron and steel schedules, and cream separators and lumber were placed on the free list. The prime object in view according to the Finance Minister (Hon. G. E. Foster) was "to cheapen the cost of manufactures in this country."[13]

Under these three sets of circumstances, it was to be expected that the tariff of 1897, introduced by Hon. W. S. Fielding, would be a somewhat complicated compromise. On the whole, it represented a reduction though it would be difficult to offer unequivocal evidence of this. Attempts were made to cheapen costs of production while, at the same time, maintaining producers' protection, i.e., many of the reductions, which the Finance Minister estimated as equivalent to 10½ per cent, were made at the expense of the Treasury rather than at that of the protected producer.

Agricultural tools (rakes, scythes, etc.) were reduced from 35 to 25 per cent while agricultural machinery was left at the previous rate, 20 per cent. Barbed wire and binder twine, important purchases of Western farmers, were made free from the beginning of the following year.

The duty on woollen and worsted yarns imported by manufacturers was reduced from 27½ to 20 per cent while that on similar yarns, n.o.p. was increased from 27½ to 30 per cent. Woollen and worsted cloth in the grey was reduced from 30 to 25 per cent while finished cloth was increased from 30 to 35 per cent.

Another type of compromise was used in the iron and steel items. Bounties which had been established in 1883 were increased in 1897.[14] At the same time, duties, on the products thus bonused, were reduced. This compromise was designed to reduce the cost of iron and steel to producers generally while at the same time maintaining the protection to the iron and steel producer. The following table shows the relevant changes:—

—	Customs Duty		—	Bounty	
	Previous	1897		Previous	1897
Pig iron............	$4.00	$2.50	From Canadian Ore.	$2.00	$3.00
			From foreign ore....	1.00	2.00
Steel ingots.........	5.00	2.00	Not less than 50% Canadian pig iron..	2.00	3.00

The duty on bars was lowered from $10 to $7 per ton. Skelp, the material for pipe, was dutiable at $7 per ton, but when imported by manufacturers of pipe (dutiable at 30 per cent), it was admitted at 5 per cent. Stoves and stove plates were reduced from 27½ to 25 per cent while fully processed structural steel was increased from 30 to 35 per cent. Steel rails were left unchanged at 30 per cent though heavy steel rails were added to the free list.

The free list gives further indication of the character of the tariff. In addition to many raw materials, machinery for mining and a wide variety of materials "when imported by manufacturers" for use "in their own factories" were included in the free list. Items of this type and in addition drawbacks for home consumption increased in number with subsequent tariff revisions and are still of great importance in the customs tariff.

Sufficient illustration has been given to show the nature of the compromise that was attempted by a country marked by regional differences of interest and contiguous to a country of rapidly increasing industrial efficiency. By the special items admitting specified manufacturers' materials free or at reduced rates of duty an attempt was made to get the advantages of the large-scale and specialized industries of the United States and Great Britain while at the same time maintaining or increasing the protection to more advanced stages of manufacture at home.

A significant innovation was introduced in the tariff of 1897. In place of the almost traditional section inviting a reciprocal trade agreement with the United States, a reciprocal tariff clause offered an immediate reduction in duties of one-eighth and, after July 1, 1898, of one-quarter, to all countries adjudged by the Governor in Council to have accorded, on the whole, equally favourable treatment to Canadian products. Great Britain was immediately accorded this reciprocal tariff. It was significant that *"equally favourable treatment"* was apparently judged by the lowness of duties and not by the differential treatment of Canadian products. In 1898 this reciprocal section was replaced by a British preferential schedule with duties one-fourth lower than the ordinary duties. In 1900 the differ-

[12] S. J. McLean, *The Tariff History of Canada* "Toronto University Studies in Political Science", No. IV, (Toronto: 1895), pp. 34, 39.
[13] *Ibid.*, p. 38.
[14] *Statutes of Canada*, 1896-97, c. 6.

ential was increased to one-third. In the revision of 1907 the fixed differential was abandoned and a separate schedule of preferential rates, approximately one-third lower than general rates, appeared in the tariff. From 1898 to the present, the preferential rates have been extended to an increasing number of the parts of the Empire.[15]

Without discussing the motives behind the establishment of the British preferential system, certain relations to a national policy of protection in the Canadian economy should be pointed out. It constituted a method of reducing tariffs which compromised with the important facts of the rise of United States manufacturing industry and the national policy of transcontinental all-Canadian transportation routes. The British preferential system left protection against the United States intact and any increase in imports which was promoted would contribute more traffic to Canadian transportation than would imports from the United States. In particular, it contributed to east-to-west traffic which was deficient in comparison with west-to-east traffic.

Another special feature of Canadian tariff policy, introduced in 1904, represents a further phase of the tariff compromise. Confronted by the bitter complaints of Ontario and Quebec manufacturers of the unfair competition to which they were subjected by the dumping policy of British and United States producers and the protests of the West and Maritime Provinces against increased protection, the government prepared an amendment to the Customs Tariff Act (4 Edw. VII, c. 11) imposing a special or dumping duty on undervalued goods. The duty, with certain exemptions, was to be equal to the difference between the actual selling price and the fair market value in the country of origin but not more than 15 per cent *ad valorem*.

The Customs Tariff Act of 1907 (6-7 Edw. VII, c. 11) was a complete revision of the tariff and introduced an Intermediate or Treaty Tariff in addition to the Preferential and General Tariffs. Aside from this innovation, changes in duties were few. Harvesting machinery was reduced under the General Tariff from 20 to 17½ per cent and agricultural tools from 25 to 22½ per cent. The specific rate on steel billets was increased from $2 to $2.50 per ton under the General Tariff. Under another statute the bounties on iron and steel were extended at declining rates to 1910. The Intermediate Tariff was to be extended, in return for benefits received, to British and foreign goods, to whose products the General Tariff previously applied. This tariff therefore became effective only as treaties were negotiated. By the fiscal year ending March 31, 1914, of dutiable imports of $410 million, imports under the General Tariff amounted to $298 million, imports under the Preferential Tariff were valued at $95 million, and imports under the Intermediate Tariff $17 million.

The proposed Reciprocity Treaty of 1910 was a restricted concession to the demands of the export regions, particularly of the West, for substantial tariff reductions. It was an attempt also to take advantage of the growing low-tariff opinion in the United States which culminated in the Underwood Tariff of 1913. The war-time increase of the Canadian Tariff by 7½ per cent on general and 5 per cent on preferential rates was largely a revenue measure and its protective effects were overshadowed by the insatiable demands for products in the war years.

During the period 1896-1920 circumstances made difficult the national policy of industrialization of an expanding Canadian economy by means of tariffs. In the previous period all regions had shared in both the export and the home markets. The rise of a highly specialized export region and the greater development of manufacturing in Central Canada made this policy increasingly divisive in its effects, but the high rate of investment fed by capital imports and the inflationary rise in prices up to 1920 prevented this from becoming acute. Disputes over division are easily settled when the dividend is increasing. The rise of mass production in United States manufacturing and the increasing importance of the Pittsburgh-Buffalo-Chicago triangle as the heavy-industry centre of the continent was at one and the same time a threat to Canadian manufacturing, particularly elsewhere than in Central Canada, and the source from which Canadian manufacturing increasingly drew its specialized materials through a series of specially-contrived holes in the Canadian tariff. Lower rates of duty on British and European products offered a way of making tariff reductions while at the same time guarding the east-west traffic which was expected to meet the costs of an ambitious national transportation policy. Intense war demands, focused particularly on countries tributary to the North Atlantic, made tariffs in the last years of the period of minor importance.

[15] *Empire Tariff Preferences,* prepared for the use of the Imperial Economic Conference, Ottawa, 1932, pp. 12-14.

9. Some Points of Strength and Weakness

The Canadian economy from 1896 to 1920 had experienced a phenomenal expansion. Within the framework of the national decisions which had been formulated in the period of Confederation and maintained with but slight modifications, this expansion had resulted in new export industries and regions linked to world markets, and growing manufacturing and service industries dependent in the main on the domestic market. A much higher degree of integration and interdependence (though mainly one-sided) had been developed but there existed certain difficulties and weaknesses, which appeared unimportant while expansion was going on. World circumstances had been very favourable to the Canadian economy throughout the period. It was likely that they would not always be so favourable.

Until 1913 Canadian expansion had been dependent on capital imports. Ultimately it would have to face the test of meeting out of its exports not only the full cost of imports but also interest charges and debt repayments. Such a test was approached during 1914-1916, but war demands and rising prices made the transition astonishingly easy. Had Canada been a neutral she might have emerged from the war period much stronger, but she emerged with a tremendously increased government debt incurred at high interest rates and in part payable abroad. Dominion net debt had risen from $50 per capita in 1901 to $266 in 1921. Not only had the War added to the Dominion debt but also the liabilities for railways, which had been contingent only, had by 1920 become actual. Interest per capita had risen from $2.01 to $15.88 in the same period. Such high financial charges of government were accompanied by greatly increased financial overheads of industry. These could be readily borne in periods of rising prices when their rigidity was an advantage, but would prove burdensome and create grave distortions of income under falling prices.

More particularly, Dominion revenues, which had been provided predominantly by customs duties, were dependent on large imports of merchandise which were the accompaniment of capital imports. Since capital imports were subject to sharp fluctuations in periods of financial crisis, Dominion revenues proved very sensitive to economic changes. Dominion expenditures (as indeed all governmental expenditures) had, however, become increasingly rigid due to the greater importance of debt charges.

To a great extent what was true of governmental finance was also true of private finance. The national income, which was dominated by export trade and capital imports, was peculiarly liable to fluctuations. For such a situation the high overhead costs inherited from the period 1896-1920 were likely to prove difficult to carry. There were also concealed overhead costs for both governments and industry. For an economy expanding at a phenomenal rate with little interruption, social services were meagre and inexpensive. Sharp contraction was, however, bound to throw on communities or the country as a whole costs of care of distressed classes and districts which public opinion would insist on being carried.

National policies of transportation and tariffs had been the occasion of regional conflicts which were certain to become sharper and more disruptive when periods of contraction or of slow and uneven expansion were encountered. Such policies had provided part of the framework within which the economy had grown up and to which it had become adjusted. Such adjustment had created vested interests, regional and sectional, which would resist readjustment. These policies, too, had increased rigidities which would be resistant to readjustment and further would thrust severe and disproportionate readjustments on exposed regions and groups.

Chapter V

APPARENT READJUSTMENT AND RENEWED EXPANSION, 1920-1929

1. The Crisis of 1920 and the Subsequent Depression

The war boom was succeeded with little interruption by a short but intense post-war boom. It was common to most countries of the world except the isolated countries of central and eastern Europe. It was due mainly to "credit expansion in the United States and to the famine in goods which made itself felt in Europe directly after peace had been declared." (Röpke). It was marked by feverish and vastly over-extended investment, not in fixed capital as in the railway boom culminating in 1873, but in inventories of goods at various stages of processing. In brief, it was a working-capital rather than a fixed-capital boom. With plenty of credit available, the scramble for commodities brought about a great rise in prices, which topped the war increase, in Canadian wholesale prices, by 22 per cent. The increase was particularly conspicuous in prices of consumers' goods and less so in prices of producers' goods. While construction activity increased sharply after 1918, the peak reached was not much more than half the value of construction in 1912.

From the peak of 1920, the price and credit structure of Canada, in common with those of other countries, collapsed to a low level reached in 1922. The contraction in prices was particularly swift and severe, amounting in wholesale prices to more than 40 per cent of the peak prices. Almost the whole of the fall had been completed in 18 months. Because of the rapidity of the preceding rise, the fall in prices represented in part only a writing off of paper values and profits. Unemployment increased sharply but was of relatively short duration. Among trade unionists the percentage of unemployed reached a high of 16·5 in the spring of 1921. This may be compared with a high of 25·5 per cent in the spring of 1933. In the former case, the worst unemployment was encountered less than one year after the crisis while in the latter case it came almost four years after the crisis.

Considering the violence of the price-fall, the contraction in Canadian exports was comparatively moderate. While wholesale prices generally fell more than 40 per cent export prices were reduced by only 26 per cent. The value of exports contracted by rather more than a third, 1920 to 1921, but that of imports shrank even more sharply. The violence of the readjustment was mitigated by a fall in the external value of the Canadian dollar, and by a capital inflow. It was not until 1923 that the balance of "export" items was sufficient to cover external interest and dividend charges.

The price collapse was greatest in farm products (50 per cent, 1920-23), particularly wheat (nearly 60 per cent, 1920-22) and hogs (50 per cent, 1920-24). Lumber prices fell by less than a quarter and newsprint by about a third. Dried cod, 1918-23, fell by more than one-half in price. Iron and steel rolling-mill products, 1920-22, fell in price by about one-third. The vulnerability of the economy through the variability of the prices of its exports was clearly shown but as yet no serious question had been raised of the competitive strength of its major exports in world markets.

The problems of readjustment were particularly severe in Nova Scotia and in the Prairie Provinces. The war boom had been especially favourable to Nova Scotia. For the time the province, and to a less extent New Brunswick and Prince Edward Island, recovered the advantages for export trade and shipping, which had fallen from her between 1880 and 1900. The tariff and even the disproportionate increase in Maritime railway freight rates (See above, IV, 7) were for the time of minor importance, for the region, with an improved competitive position, was drawn directly into the circuit of world trade. The expansion of cane-sugar production in the West Indies had enlarged her fish markets. Her greatly increased iron and steel industry absorbed her coal output so that sales to the St. Lawrence market almost disappeared. Shipbuilding revived and shipping tonnage at Halifax increased greatly, and the demand for ships' stores was large. The Halifax explosion (December, 1917) had occasioned a building boom which had no counterpart elsewhere. After 1920, the net value of production of all industries declined and did not reach its lowest point, little more than half that of 1920, until 1925.

The heaviest declines were in construction (including shipbuilding), manufacturing (iron and steel), mining (coal), agriculture, and the fisheries. With the war market gone and railway construction at low levels, the primary steel industry had to search for new markets and readjust itself to them. The St. Lawrence market for coal had been abandoned during the War and was recovered slowly and with difficulty. Lumber production dropped. Agricultural yields of hay and potatoes were less than average and the dried codfish exports never recovered the high values of 1920. Unemployment among trade unionists reached 21·6 per cent in April, 1921, and was but slightly lower in April, 1922.

The drastic decline of wheat prices reduced abruptly agricultural incomes in the Prairie Provinces but the effect, in the later years of the period, was somewhat mitigated by improved yields. The average wheat production, 1921-1925, was 342 million bushels as against 204 million bushels, 1916-1920. At the beginning of the period, sharply reduced prices were combined with low yields. The major difficulties of the Prairie region arose from the dislocation of prices and costs. The following ratios of the prices of farm implements, hardware and building and construction materials, and of railway and interest rates to Canadian grain prices indicate the magnitude of the dislocation:—

—	1920	1923	1926
Farm Implements	65	127	100
Hardware	93	149	100
Building and Construction Materials	84	147	100
Railway Rates	70	133	100
Interest Rates	61	137	100

General evidence corroborates the assumption that by 1926 the realignment of prices was satisfactory in the sense that economic expansion of the Prairie region was resumed. In terms of that roughly satisfactory adjustment, the price ratios of 1920 were much more favourable and those of 1923 very much less favourable to the region. An index of farmers' purchasing power computed by the Searle Grain Company Limited, shows a decline of 59 per cent from 1920 to 1924 and a rise of 63 per cent from 1924 to 1926.

There were, however, even more rigid elements in prairie costs than the sluggish prices mentioned above. Taxation had mounted rapidly to provide roads, schools, telephones, and the whole community equipment desired by people who had settled in a wholly unequipped area, and who saw in rising prices the prospects of increased incomes. Taxation was reduced but little with the fall in prices. More important, purchases of farm lands, 1917-20, were very large. Wheat prices were high and, though yields were low, the memory of the phenomenally high yields of 1915 was strong. Farmers, calculating the incomes which would result, when the yields of 1915 were multiplied by the prices of 1917-1920, bid up the price of land. Except for the northern areas, the homestead era was over and Hudson's Bay, school, and railway-grant lands as well as lands owned by individuals were purchased at high prices. Proceeds of sales of these lands in 39 years, 1893-1930, totalled $276 million; for the five fiscal years 1917-1921, proceeds were $82 million. For these five years, proceeds of these land sales averaged more than $16 million a year while for the remaining 34 years they were less than $6 million. The average price per acre (1917-1921) was more than double that paid in the remaining periods. These records are indicative of the concentration of land purchases from all sources in this period of high prices. Records for one Saskatchewan municipality, reported by W. A. Allen, show that the average cash payment was but 17 per cent of the total price.[17]

The years, 1918-1920, were one of the periods when company (and presumably individual) investments in farm mortgages in the Prairie Provinces, were largest. The fact that in 1917 the three provinces enacted Farm Loan Acts (the Alberta Act was not put in force) reflected the pressure for long-term credit at lower rates. In addition Manitoba and Alberta passed legislation setting up co-operative credit societies to supply short-term credit to farmers.

A great area of prairie farm land was over-capitalized and subjected to heavy fixed charges in the period of high wheat prices. The high land values reflected high potential rather than actual farm incomes, for the yields in these years were low.

The cattle industry, which had increased greatly during the War, particularly in Alberta, was badly hit by the United States Emergency Tariff of 1921, and the Fordney-McCumber Tariff of 1922. Not only was the export to the United States greatly

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[17] See W. A. Mackintosh, *Economic Problems of the Prairie Provinces,* in series "Canadian Frontiers of Settlement", (Toronto, 1935), p. 262.

restricted, but farmers who had purchased cattle for feeding lost heavily through the decline in prices.

Even though farm prices had by 1925 resumed a more profitable relationship to other prices, taxes and debt charges remained at peak levels. A clear demonstration had been given of the vulnerability of the Prairie region to fluctuating wheat prices and yields. The vulnerability had been greatly increased by the fact that in the period of expansion and settlement, heavy overhead costs, public and private, had been assumed to make expansion possible and to provide the vast equipment of production and of social life necessary for a population of 2,000,000 people. Highly fluctuating incomes made heavy fixed charges difficult to carry. To a marked degree the Prairie region was "trading on the equity." The practice was unavoidable in a pioneer economy; the danger lay in the degree.

The depression in British Columbia was sharp but not as prolonged as in Nova Scotia or the Prairies. The contraction to the low point of 1921 was greatest in the forest industries (dependent to a high degree on the Prairie market), and less in fisheries, mining, and manufacturing. British Columbia had not participated to the same extent as the other regions in the war boom and her contraction was correspondingly less.

2. Apparent Readjustment by 1925

By 1925 Canadian expansion had been resumed. For most industries price-relationships were once more conducive to investment, new resources and new techniques had started strong expansion in certain industries and world conditions were favourable to increased international trade and therefore to economic expansion in countries such as Canada.

"Already in 1925, commercial policy had been 'normalized' to such an extent that relatively few quantitative restrictions remained. The monetary and financial systems of old and new countries were reorganized. . . . The index of world production of primary commodities in 1925 had risen to 17 per cent above the 1913 figures. This should be compared with an increase in world population by 6 per cent and in the volume of world trade by 7 per cent. The following four years saw an extraordinary rapid improvement in technique and management both in agricultural and manufacturing industries. Transport facilities were much improved through the growing use of motor cars and electricity. As a number of currencies had been stabilized and the commercial policy, although far from stable, did not change very much, international trade expanded even more than production. For foodstuffs the increase in output was small, but the production of raw materials advanced by almost 5 per cent per annum and the activity in manufacturing industries seems to have risen even a little more. During the whole period 1925-29, the increase in the production of primary goods was 11 per cent, but world trade showed the impressive rise of 19 per cent. This trade revival was stimulated by a large increase in international lending."[18]

Into this revival of world trade and investment Canada was drawn. The national money income had been rising since 1921 but more slowly than exports. Not until 1925 was the rise of export income reinforced by a strong rise in investment and national income increased more rapidly than exports. Not only had world factors become favourable to this but Canadian industry had readjusted itself to changed price and cost conditions.

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[18] Bertil Ohlin in *International Economic Reconstruction*, Carnegie Endowment for International Peace and International Chamber of Commerce, 1936, pp. 38-39.

TABLE 5—ECONOMIC TRENDS 1921-37

—	Merchandise Exports ($ mm.)	Merchandise Imports ($ mm.)	Current Balance on Account Merchandise, etc. (a) ($ mm.)	Interest and Dividend Balance ($ mm.)	Net Long-term Capital Movement ($ mm.)	Index of Home Investment (b) (1926 = 100)	Increase in Railway Mileage in Operation (c)	Terms of Trade (d) (1926 = 100)	Wholesale Price Index (1926 = 100)	Immigrant Arrivals (e)	National Income (f) Produced (1926 = 100)
1921.....	800·4	827·8	+ 29·8	−187·0	+137·6	64·4	386	110·1	110·0	91,728	83
1922.....	884·1	744·6	+143·0	−190·4	+237·1	89·0	167	94·3	97·3	64,224	83
1923.....	1,003·9	885·1	+263·6	−213·5	+142·4	84·2	296	85·0	98·0	133,729	87
1924.....	1,032·6	789·9	+339·5	−202·0	+113·3	74·0	405	91·1	99·4	124,450	87
1925.....	1,241·1	872·4	+483·7	−210·5	− 50·5	79·9	291	99·0	102·6	84,907	93
1926.....	1,266·5	989·1	+429·3	−218·1	+ 54·6	100·0	....	100·0	100·0	135,982	100
1927.....	1,222·4	1,083·5	+274·0	−210·8	− 20·3	112·4	220	100·1	97·7	158,886	107
1928.....	1,355·4	1,224·4	+352·7	−221·0	−168·6	126·6	452	98·0	96·4	166,783	116
1929.....	1,169·3	1,300·6	+ 64·3	−260·1	+ 66·1	154·6	358	97·8	95·6	164,993	119
1930.....	874·6	996·7	+ 2·1	−288·6	+315·7	122·5	667	92·5	86·6	104,806	105
1931.....	593·7	611·1	+201·5	−279·8	+ 19·4	84·6	233	83·6	72·1	27,530	85
1932.....	492·4	418·7	+239·5	−261·8	− 49·1	35·6	129	77·9	66·7	20,591	69
1933.....	532·3	385·7	+244·3	−224·3	− 50·4	26·1	− 73	75·6	67·1	14,382	65
1934.....	652·9	504·8	+282·4	−211·6	− 96·9	33·7	− 66	79·2	71·6	12,476	72
1935.....	735·6	542·9	+385·5	−208·6	−173·6	42·9	646	79·8	72·1	11,277	77
1936.....	947·9	625·7	+542·3	−233·8	−256·3	43·6	− 364	84·0	74·6	11,643	84
1937.....	1,010·0	798·0	+464·3	−247·0	−208·0	60·1	176	90·3	84·5	15,101	93

(a) Merchandise, gold, tourists, insurance, freight, and other current items.
(b) Value of construction contracts awarded. *Canada Year Book* (1937), p. 479.
(c) *Canada Year Book* (1937), p. 636.
(d) Export prices as percentages of import prices. D.B.S. Price Indexes.
(e) *Canada Year Book* (1937), p. 194.
(f) *Monthly Review*, The Bank of Nova Scotia, May 1937, and July 1938. Figures for 1936 and 1937 are preliminary.

Interest rates were about 25 per cent higher than in the pre-war period, and public interest charges were a much higher percentage of the national income. It has been estimated that interest charges on public debts in 1925 amounted to about 6 per cent of the available national income and did not during the ensuing boom fall significantly below 5 per cent. Taxation had increased greatly and is estimated in 1925 to have taken 14 per cent of the national income.[19] The increase in wages during the war period had been great and the decrease after 1920 comparatively small. Wages in skilled trades stood at 180 in 1925 compared with 100 in 1913 and 198 in 1920 according to the Department of Labour's index. Wages of common factory labour at the same dates were at 186, 100 and 215 while those of miscellaneous factory trades stood at 196, 100 and 217. These indexes of money wages are to be compared with cost of living indexes of 152 for 1925, 100 for 1913 and 190 for 1920. While there had been substantial improvement in output per man during the war years, the maintenance of these wage-levels was made possible by a greatly increased productivity in the post-war years. Industrial productivity per man is estimated to have increased by more than one-third in the first half of the decade and continued to increase thereafter. This was accomplished by a better selection of labour after demobilization, improved organization, and increased mechanization. High wages and improved machinery were powerful forces in promoting rapid mechanization of farms. By 1926 there were 50,000 tractors on prairie farms and by 1928 more than 4,000 combine-harvesters. Railway rates had been favourably adjusted to prices. Wholesale prices in 1925 were 60 per cent above the 1913 level while railway rates were 47 per cent above. Grain rates were 8 to 40 per cent higher.

Adjustment to these changed factors had been made, not only in Canada, but also in the United States and elsewhere, largely by very great if not unprecedented improvements in organization and technique. The adjustment did not, however, remove the rigidity of the fixed costs which were a larger proportion of the national income than they had been in pre-war days. In the face of the variability of the incomes of the export industries, they increased the vulnerability of the economy as a whole and of individual regions.

[19] *Bank of Nova Scotia Monthly Review*, May, 1937.

3. The Expansion, 1925-1929

Expansion in the next five years was rapid and widespread. It was favoured by liberal credit, technological changes, and agricultural yields, particularly in the prairie region, much greater than average.

Despite a price level nearly 40 per cent below that of 1920 (export prices, 42 per cent below), the value of exports for the calendar year 1929, was not far below that of 1920. If other current "export" items (tourists' expenditures, freight, insurance, gold exports, etc.), be added, the figure for 1929 was substantially above that for 1920. Wheat and wheat flour, woodpulp and newsprint, sawmill products, automobiles, and fish continued to be leading exports as in 1920. Sawmill products and fish had, however, receded in value. Wheat and wheat flour were about the same as in 1920, though in the preceding year they had exceeded all previous figures. Newsprint and woodpulp had more than doubled in value as had also automobiles. The most important change in exports had, however, been the rise of base metals and gold. The former had become third in the list of exports while gold exports were almost equal to those of automobiles and of fish.

The concentration on a few large exports is significant. Wheat and wheat flour represented nearly one-quarter of the whole (and 1929-30 showed lower exports of wheat than any year since 1924-25); together with newsprint and woodpulp (mainly Quebec and Ontario) base metals (Ontario, British Columbia and Quebec) and gold (mainly Ontario), they made up more than half the total value of exports. For the fiscal years, 1926-1929 wheat and wheat flour were only slightly less important relatively than in the five years preceding the War, but considerably more important than in seven years 1915-1921. Newsprint, base metals, and gold had, of course, greatly increased their importance. They had replaced in importance sawmill products, various food products, such as meats; granulated sugar, and cheese, and a variety of industrial products which never recovered their war-time markets. The new exports were more restricted in origin and, by their increasing importance, and the rapid increase in investment in their production, tended to break the simpler unity which had centred on wheat. Though statistical information is lacking, it cannot be doubted that the prairie market declined in its *relative* importance for the rest of Canada in this period.

There had been an increased specialization in a few exports highly sensitive in price to world economic conditions. In the new exports the Maritime Provinces had a comparatively minor place.

In the calendar year 1920 there were but five manufacturing industries in Canada with a net production of over $50,000,000 each. Pulp and paper, sawmills, foundries and machine shops, meat packing, and rolling mills and steel furnaces made up the list. The values had been inflated by the price rise and the demands for meat products and steel were temporary in nature. In 1929, despite prices nearly 40 per cent below the level of 1920, there were nine manufacturing industries in this group. The pulp and paper industry still held first place at more than double the figure of any other manufacturing industry. Non-ferrous metal smelting had risen spectacularly to second place, while the electrical apparatus and supplies industry (deriving much of its market from the first two and from central electric stations) had achieved third place. Sawmills had fallen to fourth place followed by printing and publishing, automobiles, castings and forgings, rubber goods and railway rolling stock. Meat packing and flour milling, which the unusual demand of 1920 had put in the front rank, had during the decade contracted.

Although estimates for 1920 are unsatisfactory, it can be said that national money income per head of population was probably lower in 1929 than in 1920 by reason of the nearly 40 per cent decline in prices. Real income per head was probably 25 to 30 per cent higher in 1929. Over the period about one-third of the national income was derived directly from exports.

At the same time, fixed (money) charges had increased greatly both in public and private finance and while improved industrial efficiency, the exploitation of new resources, and a high rate of investment had brought national money income nearly up to the level of 1920, sharp fluctuations in that money income were sure to occasion great distortions in distribution because of the larger percentage of fixed charges. Any severe contractions in exports would occasion a serious drop in money income which the larger percentage of fixed charges would thrust with exaggerated severity on exposed groups and regions.

Home investment was far less dependent on capital imports than in pre-war years. From 1920 to 1924, mainly a period of slack business, net

capital imports amounted to $774 million, but in the boom years, 1925-1929, there was a net capital export, i.e., a reduction of net indebtedness abroad, of $119 million as compared with a net capital import of $1,830 million in the boom years, 1910-1914.

Though there had been no great drop in fixed-capital investment, as indicated by construction contracts, in the collapse of 1920-21, there was little or no expansion until 1926. The indications are that between 1925 and 1929 the annual investment almost doubled. This combined with an increase in "exports" to a level more than 25 per cent above the level of 1921-1924 to raise the available national income (Bank of Nova Scotia estimate) by roughly 27 per cent.

4. Industrial and Occupational Shifts

During the decade, and particularly during the last half of it, there had been important shifts in the sources of the national income. In general, agriculture had declined relatively in importance and despite abundant crops the decline had been most marked in the later years. Contributing 41 per cent of the national net production in 1920, it contributed 40 per cent in 1925, 36 per cent in 1928 with bumper crops and 26 per cent with the poor yields of 1929. Forestry worsened slightly, fishing maintained its relative position, though not in the Maritime Provinces, while mining increased substantially in relative importance before 1929. Since the boom of 1926-1929 was a construction boom in contrast to that culminating in 1920, the construction industry increased its relative importance, as measured by net value of production, from 4 per cent in 1920 and 6 per cent in 1925 to 10 per cent in 1929. The change in manufacturing was most marked; from 33 per cent in 1920 and 31 per cent in 1925 it rose to 40 per cent in 1929. Agricultural prices the world over showed a tendency to sag from 1926 on and this was apparent in Canadian grain prices, the index for which fell from 110 in 1925 to 94 in 1929. The impending change was concealed by the abundant yields of 1927 and 1928 and by improving prices for beef and dairy produce. These improving prices at home greatly reduced Canadian exports of meats and dairy produce and even brought, at the end of the period, imports of butter from New Zealand. Canadian agricultural exports were, therefore, more than ever concentrated in grain.

Still further shifts in the Canadian economy can be discerned in the census records of occupation. Between 1921 and 1931 there were striking relative increases in the numbers gainfully occupied as unskilled workers, in the service industries (custom and repair, domestic, personal and professional services, public administration, and recreational services), in transportation, and in construction. Neither manufacturing nor agriculture kept pace with these industries. The proportion of the gainfully occupied engaged in "service" industries (including also trade, finance, and transportation) had increased from 36 to 40 per cent while that in construction had risen from 5·8 to 6·5 per cent. These changes were associated with increased urbanization, the growing importance of the tourist industries, and of occupations related to the increasing use of the automobile and truck, and to the heavy investment in fixed capital particularly in the latter part of the period. It is of significance that several of these occupations which were gaining proportionately were among the most vulnerable from the point of view of depression.

5. The Maritime Provinces

Broadly the pattern of development for the country as a whole was dominated by the experience of Ontario and Quebec but there were, within the different regions, marked variations in pattern.

Generally speaking, circumstances were against the Maritime Provinces. They faced serious readjustments after 1920 and they failed to participate fully in the vigorous upswing after 1925. The decline was most severe in Nova Scotia and was very slight in Prince Edward Island. In the face of an increase of 18 per cent in population for the whole Dominion, 1921-1931, the population of Prince Edward Island had declined, though insignificantly, that of Nova Scotia had declined by about 2 per cent and that of New Brunswick had increased by about 5 per cent. In 1921 these provinces had 11·4 per cent of the population of the Dominion and in 1931 only 9·7 per cent.

TABLE 6

Net Value of Production and Percentage to the Total Net Value of Production for the Dominion

—	1920 (Millions of dollars)	1920 Per cent	1926 (Millions of dollars)	1926 Per cent	1929 (Millions of dollars)	1929 Per cent
Prince Edward Island	24·4	0·7	26·3	0·7	23·5	0·6
Nova Scotia	185·3	5·0	124·2	3·4	129·4	3·3
New Brunswick	115·3	3·1	91·0	2·5	87·4	2·2
	325·0	8·8	241·5	6·6	240·3	6·1

In all three provinces there was a decline in the numbers engaged in agriculture, the largest occupational group, as also in manufacturing. Those engaged in fishing had increased in Prince Edward Island and New Brunswick but decreased in Nova Scotia. The numbers in the construction industry had changed little in Prince Edward Island and New Brunswick but had declined sharply in Nova Scotia on account of the completion of the Halifax building boom and the post-war decline in shipbuilding. There was a shift toward the "service" industries, similar to but much less pronounced than that in Central Canada. The numbers in the Nova Scotia mining industry (coal) had increased slightly.

These shifts in occupation resulted from shifts in the competitive position of the chief Maritime industries. The war boom had favoured agricultural areas that were adjacent to the North Atlantic. There was some direct export and competition from other regions was lessened. After 1920 competition in the European market was too severe for anything but specialty products and the United States market was closed to many products by the tariffs of 1921 and 1922. Only in the specialties of apples, table potatoes, and seed potatoes was there significant growth.

Until the end of the War, Great Britain was the major market for Maritime lumber, the most important of the forest products. After 1920, the long depression in British building reduced the importance of that market which yielded first place to the United States. The opening of the Panama Canal subjected eastern producers to new and severe competition from the British Columbian product both in the British and the United States market.

The paper industry came late to the Maritime Provinces. Though pulp had been manufactured for many years, the entire product had been exported. The production of paper began in 1923 in New Brunswick and 1930 in Nova Scotia. It had not developed sufficiently up to 1929 to offset the decline in lumbering. The estimated production of pulpwood had, however, almost doubled between 1925 and 1930 and of it more than half was consumed by local mills.

The fishing industry had likewise experienced altered circumstances. During the War all markets for fish had expanded. For fresh and frozen fish entry into the United States was free. The West Indian markets were buoyant, competition was reduced, and the home market for fish was increased. After 1920 readjustment became necessary. In 1921, United States duties were reimposed on fresh and frozen fish, the domestic market declined, and West Indian depression narrowed that market. Icelandic and European competition intensified the pressure on the industry. The West Indian Trade Agreement of 1925 is alleged to have effected little for the Nova Scotian fishermen in that the preferences granted were equally extended to their competitors, the Newfoundlanders. While the staple trade in dried and pickled codfish recovered only to about two-thirds of its 1920 peak, the export and domestic trade in fresh and frozen fish and in canned fish offset a large part of this deficiency. The net production of the Nova Scotian fisheries had been somewhat less than $13 million in 1920; in 1929 it was somewhat more than $11 million. There had been substantial recovery by 1926 from the depression, but thereafter production sagged.

It has already been indicated that severe readjustment faced the coal and steel industry of Nova Scotia at the end of the war period. Already before the War the United States market had become of slight importance for coal. The hope of the industry lay in the revival of the steel industry, the recapture of the Quebec-Ontario market which had been entirely lost during the War, and the expansion of local markets including railway and steamship demand. Remarkable progress was made in recovering the St. Lawrence market. Having taken less than 5 per cent of the total sales in 1920, that market was taking 44 per cent by 1929. During this period the Canadian tariff on bituminous coal was not changed and, while rail subventions were established in 1928 and Maritime freight rates had been reduced in 1927 these changes had little effect on this period, 1920-1929. The fall in water rates after 1920 was a favourable factor of major importance to the coal industry. It should be noted, however, that from 1913 to 1927 Maritime freight rates had been increased in relation to all other Canadian rates.

Though sales to the St. Lawrence market more than recovered their pre-war volume, the consumption of the steel industry did not reach the pre-war mark. Total sales of Nova Scotian coal reached 5,700,000 long tons in 1929 as compared with 6,500,000 in 1913. Of the smaller amount Nova Scotia (including the steel industry) took 38 per cent whereas she had taken 44 per cent

of the larger sales in 1913. The contraction of the market for rails and railway material, the necessity of finding new and diversified steel products (in most of which Montreal and Ontario plants had the advantage of denser market close at hand), the increased importance of steel scrap as a raw material and the cheaper supply of it in the more densely populated sections of Ontario, and the general over-capacity of the world steel industries, which made export markets unprofitable, were important reasons for the failure of the Nova Scotian steel industry to recapture fully its pre-war position. Economies in the use of coal in the industry further reduced the consumption of coal. The capacity of the steel industry, both in Ontario and Nova Scotia, had been greatly increased, 1910-12, just as the bounty system expired and just as the demand for rails passed its peak. Aside from the general 7½ per cent increase in the war period, which was offset by the decline in the percentage equivalents of specific duties, increased protection was not given to the primary steel industry until 1930.

The ports of Halifax and Saint John had benefited, during this as during the preceding period, from improved railway and harbour facilities. Expenditures on the two harbours up to the end of 1936 had been respectively, $26,978,000 and $21,958,000, of which more than half had been made since the setting up of Harbour Commissions in 1927. The requirement of direct shipment to a Canadian port in order that goods should be admitted under the preferential tariff (section 7) was an additional factor in increasing the volume of traffic.

More than any region of Canada the Maritime Provinces were forced to readjust themselves, 1920-1929, to changed and unfavourable market conditions. Except for a modest share in the rising pulp and paper and electric power industries and in the tourist trade, the great boom of 1926-1929 had largely passed them by. The period, 1920-1929, was in some respects comparable for the Maritime Provinces to that from 1880-1900. There was a similar loss of competitive strength in world markets, a worsening in the trade position of their most important exports. There was a similar not fully successful attempt to substitute the domestic for the foreign market. The tariff was one among many influences promoting this change. The effect was a difficult transition and the depression of those industries for which the domestic market was no practical alternative.

Table 7

Percentage of the Net Production of Certain Maritime Province Industries to Total Canadian Net Production in the Same Industries

—	1920	1926	1929
Prince Edward Island—			
Agriculture	1·3	1·6	1·9
Fisheries	3·5	2·5	2·4
Nova Scotia—			
Agriculture	4·0	2·8	2·9
Fisheries	25·8	22·2	21·3
Mining	16·0	12·0	9·9
Construction	9·7	1·3	2·5
Manufactures	3·8	2·3	2·1
New Brunswick—			
Agriculture	3·1	2·4	2·7
Forestry	10·0	8·6	7·3
Fisheries	8·9	9·4	11·0
Manufactures	2·3	2·0	1·6

6. The Prairie Provinces

Satisfactory adjustments having apparently been made, the Prairie Provinces resumed expansion in 1925 under the stimulus of higher wheat prices and larger agricultural yields. Though agricultural prices fell off somewhat, the purchasing power of farm products fell only about 5 per cent between 1926 and 1928. Market conditions and technological changes were conducive to expansion. Russia had not yet re-entered the wheat market, and while the production of wheat in European importing countries was increasing, the high yields of later years had not yet been reached. Mechanization, for which the base had been laid in the technical advances and high wages of the war years, came rapidly as soon as agricultural prosperity returned. The number of tractors on prairie farms increased from 50,000 in 1926 to 82,000 in 1931, combine harvesters from practically none to 9,000, and motor trucks from 6,000 to 22,000. The combines reduced labour requirements and labour cost and increased the economic area of "the one-family farm." The tractors and trucks not only did this but in addition released a large acreage from the production of horse-feed for that of saleable grain. New varieties of wheat further extended the area of production. The opening of the Panama Canal gave to part of the region cheaper transportation.

The area of occupied farms increased by 24 per cent, 1926-1931, that of improved farm land by 22 per cent and the acreage sown to wheat by 17 per cent. Favourable weather conditions gave higher

yields so that the average annual production of wheat, 1926-1930, was 412 million bushels as compared with 342 million bushels, 1921-1925. The population increase, 1926-1931, was more than double that from 1921-1926. Immigration became once more important and new settlements spread across northern Saskatchewan and particularly in the Peace River area of Alberta and British Columbia.

The revived expansion of the Prairie Provinces was based on circumstances affecting their major product. Agriculture was overwhelmingly predominant in the prairie economy but progress had been made in other industries. In Manitoba the pulp and paper industry, electric power production, metal mining, and manufacturing in the Winnipeg area had increased and the construction enterprise involved had been considerable. In Saskatchewan lumber mills and manufacture had shared in the general advance. In Alberta there had begun a spectacular increase in the production of crude petroleum but the coal industry languished. Railway construction, 1926-1931, in Canada was almost entirely the building of branch lines in the Prairie Provinces, particularly Saskatchewan and Alberta. Of 1,900 miles built, 1,700 were in the Prairie Provinces.

The relative positions of the Prairie Provinces in this period are indicated in the following table:—

Table 8

Percentage of Net Production of Certain Prairie Province Industries to Total Canadian Net Production in the Same Industries

	1920	1926	1927	1928	1929
Manitoba—					
Agriculture	8·3	9·0	6·9	7·1	6·6
Forestry	1·1	1·2	2·1	1·7	2·0
Electric Power	4·1	5·4	5·2	5·3	5·2
Manufactures	4·0	3·8	3·8	3·9	3·3
All Industries	5·7	5·7	5·1	5·7	4·7
Saskatchewan—					
Agriculture	16·4	23·0	24·3	24·3	16·7
Manufactures	1·4	1·7	1·7	1·7	1·8
All Industries	7·8	9·8	10·4	10·0	6·1
Alberta—					
Agriculture	12·6	16·0	19·8	16·5	12·4
Forestry	0·8	1·3	1·7	1·8	2·3
Mining	15·8	11·2	11·8	11·8	11·2
Manufactures	2·0	2·2	2·1	2·3	2·2
All Industries	7·2	8·2	9·7	8·3	6·0

The Prairie Provinces shared fully in Canadian expansion, 1925-1929, and contributed much to it. Saskatchewan and Alberta, except for the lean year of 1929, had bettered their relative positions considerably. The advance, however, was based on a conjuncture of circumstances not likely to be permanent. The first of these circumstances was the shift in world wheat production and exports which had occurred during the War. Figures published by the Secretariat of the Wheat Advisory Committee in January, 1938, show clearly the importance of these shifts:—

Areas Sown to Wheat

(millions of acres)

—	1909-1913	1922
Argentina	16·1	16·3
Australia	7·6	9·8
Canada	9·9	22·4
United States	52·0	67·2
Four Overseas Exporters	85·6	115·6
Four European Exporters: Poland, Lithuania, Danube Basin, and U.S.S.R.	97·2	54·9
Nineteen European Importers	50·5	45·9

Whereas the four overseas exporting countries had 50 per cent of the world export trade, 1909-1913, they had 94 per cent, 1922-1923. Canada had increased her percentage from 14 to 39. (For the calendar year 1928 Canadian wheat exports were 53 per cent of world wheat exports.) The share of seven European exporters declined from 40·5 per cent in 1909-1913 to 1·4 per cent in 1922-1923. Nineteen European importers obtained 37 per cent of their requirements from abroad in 1909-1913 and 40 per cent in 1922-1923. These shifts were facilitated by technological changes (including new varieties of wheat) which favoured the overseas exporters. The Prairie Provinces found themselves at the peak of the 1926-1929 boom with an unprecedentedly large share of the world's export wheat market—a share which was dependent on the failure of European importing and exporting countries to resume their pre-war scale of wheat production and on the willingness of the importing countries to admit Canadian wheat freely to their markets. Though unquestionably the effectiveness of Canadian wheat production had increased relatively to that of Europe, political and economic conditions in Europe caused a lag in the post-war wheat readjustment which brought an over-expansion in Canadian wheat production. When the

delayed readjustment was made, the swing was greatly exaggerated by depression fears and nationalistic programs.

The second of the circumstances favouring the advance in the Prairie Provinces in this period was the favourable weather conditions which produced average wheat yields for the years 1925 to 1928 higher than for any other four consecutive years in the history of the area.

7. British Columbia

The development of British Columbia industry during the decade was relatively greater than for the country as a whole. It was comparable to that of the Prairie Provinces in which, however, increases were concentrated more in the second half of the decade.

TABLE 9

Percentage of Net Production of Certain British Columbian Industries to Total Canadian Net Production in the Same Industries.

—	1920	1923	1926	1927	1928	1929
Forestry	21·3	21·9	24·7	24·7	25·6	25·7
Fisheries	45·3	48·8	48·6	47·1	48·3	44·7
Mining	18·5	20·5	27·3	24·6	23·5	21·9
Construction	11·5	7·9	7·7	7·8	8·6	9·1
Manufacture	4·9	6·3	7·4	7·4	7·4	6·6
Total, Goods-Producing Industries	6·2	7·6	8·0	7·5	7·8	8·4

In comparison with other regions and with other industries in British Columbia, the forest and mining industries experienced phenomenal growth. Their expansion was, in large part, the result of two changes which had revolutionary effects on the position of the region: (1) the opening of the Panama Canal, and (2) the discovery of a method for treating the complex non-ferrous metal ores of the Kootenay district.

The Panama Canal, though first opened in 1914, did not affect Canada, because of interruption of traffic and high ocean rates, until 1921. From that year a steadily increasing volume of traffic has served British Columbian ports through the Canal. Grain exports from the prairies increased from that date and were helped by the rail-rate reductions of 1922, 1925, and 1927 and the large crops, 1926-1929.

The first importance of the Panama Canal for the British Columbia lumber industry was that it permitted its products to enter the eastern markets of Canada and of the United States where it had had free entry since 1913. Reports of the United States Tariff Commission show vividly the changed competitive position of the industry. In 1920 before Panama Canal competition was effective, rail-rates per thousand feet of lumber from the Southern pine areas and the Pacific Coast were as follows:—[20]

—	To New York	To Illinois
From South	$14.04	$10.53
From Pacific Coast	27.30	21.58

The rate from the Pacific Coast to New York was stated to be fully two-thirds of the delivered price. An investigation in 1929 revealed a completely different situation:—

TABLE 10

Cost of United States and British Columbia Lumber in New York and Chicago, 1929, per M. feet ([a])

—	New York			Chicago		
	Mill Cost	Transportation	Total	Mill Cost	Transportation	Total
	$	$	$	$	$	$
Douglas Fir—						
British Columbia	22.50	10.11	32.61	22.50	17.31	39.81
United States	22.96	10.45	33.41	22.96	17.28	40.24
Southern Pine	28.64	11.05	39.69	28.13	9.75	37.88

([a]) Report to the President on Lumber, United States Tariff Commission, No. 32, Second Series, 1931.

By these rate changes, British Columbia entered the eastern markets, which were by far the largest markets for lumber on the continent and did so at greatly increased mill prices.

Before the War, British Columbia had been dependent for about 70 per cent of her market on the Prairies. By 1928 the prairie market had recovered to nearly the same absolute figure but it was considerably less than one-third of the production, now double the pre-war figures. There had been increases in exports to other continents, very substantial in the case of China and Japan, but over half the increase was absorbed by the

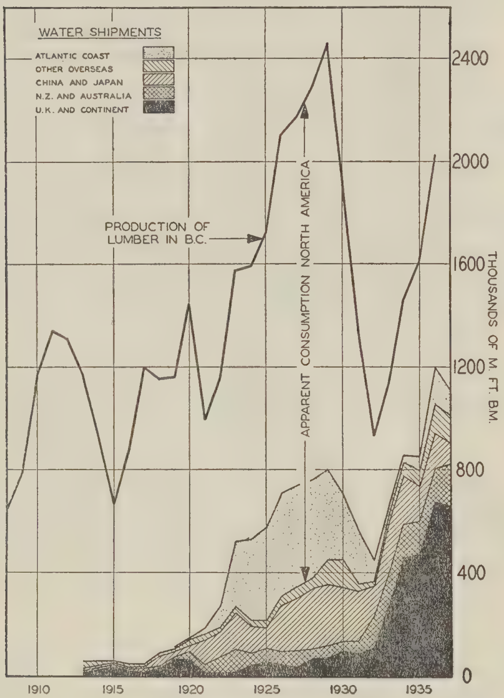
[20] Tariff Information Surveys on Articles in Paragraphs 647 and 648 of the Tariff Act of 1913, U.S. Tariff Commission, 1922.

Eastern Canadian and United States markets. Up to 1925 the greatest factor in the increase in British Columbia lumber production was the opening of the Atlantic Coast markets *via* the Panama Canal; after 1925 this was supplemented by the recovery of the prairie market and to a less extent by the expansion of trade with China and Japan.

To the expansion of trade in sawn lumber, there was added an important share in the rise of the Canadian pulp and paper industry.

CHART I

PRODUCTION AND CONSUMPTION OF B.C. LUMBER



Panama Canal competition also reduced rates on a great many commodities moving from Eastern Canada to the Pacific Coast, although many finished consumers' goods moving at class-rates have not been affected by the competition. It was estimated by the Canadian Pacific Railway and accepted by the Board of Railway Commissioners that, during 1925, 14·7 per cent of the traffic was affected by the mountain differential while 85·3 per cent was not. The major influence in the reduction of the importance of the mountain differential was the Panama Canal.

The great increase in the British Columbian mining industry dates from 1923. It had expanded substantially during the war years on the basis of very high prices for base metals. The larger plants, more complete technical equipment, and resources for experimentation gained in this period, had resulted by 1923 in a process for treating complex ores in which the cheap available hydro-electric power was of the first importance. By 1923, the mineral industry had fully recovered its war-time peak and by 1925 it was 50 per cent above the 1923 level.

The expansion of these two industries was followed, particularly after 1925, by expansion of the manufacturing and construction industries, reflecting a high rate of investment in the region for which new markets had been opened and old resources enhanced in value. The growth of Vancouver, which had been held in check during the war period, reflected not only the rapid rate of industrial expansion in the province, but also the extension of its metropolitan influence into the prairie region.

The expansion of the 1920's was much less dependent on the prosperity of the wheat-growing region than that of the pre-war period, though inland lumber still relied on that market. British Columbia, to a much greater degree than formerly, had succeeded in reaching export markets directly with her own products. She had made great gains but her position was vulnerable. Base metals were notoriously variable in price. Her chief lumber markets were dependent on the continuance of favourable tariff treatment. The high ratio which freight rates bore to the mill-price of lumber meant that fluctuating ocean rates would bring sharp changes of fortune to the industry. The prairie market, itself vulnerable, was still of great importance. In background there was also the fact that the expanding industries were based on resources subject to depletion.

8. Central Canada

Central Canada, Ontario and Quebec, increased the value of net production during the period, 1920-1929, from $1,400 million to $1,658 million in Ontario and from $962 million to $1,050 million in Quebec. Both provinces maintained or even improved somewhat their *relative* positions in Canadian production during the decade. Quebec lost ground relatively in the middle of the decade but gained it back quickly in 1929 with increases

in mining and construction. Ontario, in contrast, withstood the depression, 1921-1924, better than the rest of the country, lost ground relatively when the upswing came in 1925, and forged ahead in 1928 and 1929. The relative betterment in agriculture in both provinces in 1929 is largely a statistical corollary of the fall in prairie farm production.

The following table shows the positions of the main goods-producing industries of this region relative to those of the country as a whole:—

There was in both provinces a marked increase in manufacturing (50 per cent in Quebec and rather less in Ontario, 1925-1929), which was not, however, disproportionate to the increase in other regions. Both provinces shared in the development of the industries processing provincial raw materials, particularly the pulp and paper and non-ferrous metal smelting industries, and in the associated central electric station and electrical apparatus and supplies industries, though in the latter case expansion in Ontario was more rapid. Cheap power also became the basis of industries processing imported raw materials such as the aluminum industry based on Saguenay power. Aside from the industries applying power to local raw materials, Quebec continued to specialize in a few large industries while Ontario's development was more diversified. Certain consumers' goods industries using a high proportion of labour concentrated in Quebec while the automobile and highly mechanized industries were specialties of Ontario.

TABLE 11

Percentage of Net Production of Certain Quebec and Ontario Industries to Total Canadian Net Production in the Same Industries

—	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929
Quebec—										
Agriculture	23·3	23·6	18·6	16·2	17·3	16·5	15·6	15·1	15·2	19·9
Forestry	34·0	35·0	34·6	33·2	31·8	30·8	31·9	32·8	32·7	31·3
Mining	13·6	9·3	9·5	9·5	9·1	10·7	10·8	11·7	13·5	14·9
Construction	28·8	26·4	31·2	33·4	32·9	42·0	40·9	32·9	31·7	33·3
Manufacturing	29·7	29·6	30·9	31·6	31·1	30·0	30·4	31·6	30·9	30·9
All Industries	26·1	26·1	24·7	24·4	24·2	23·9	23·6	23·6	23·8	26·5
Ontario—										
Agriculture	28·2	29·4	28·1	28·5	30·3	27·1	26·9	25·6	26·2	32·9
Forestry	27·6	29·7	29·4	29·6	30·2	29·8	28·0	25·7	26·9	26·8
Mining	31·4	29·7	35·8	37·7	41·2	38·9	35·2	36·4	36·2	37·9
Construction	38·0	45·1	49·8	48·6	48·3	39·4	37·5	45·6	38·8	36·2
Manufacturing	51·7	52·8	51·6	51·3	51·2	51·3	50·7	50·0	50·3	51·2
All Industries	38·0	39·6	39·3	39·7	40·3	37·9	37·7	37·7	38·2	42·0

In the maintenance of these positions there were, however, certain shifts which are significant. There was a tendency, particularly pronounced in Quebec, toward absolute and relative decline in agriculture. This was associated with a decline in the number of farm operators in both provinces though the number of farm labourers increased. It was not merely the reciprocal of the expansion of prairie agriculture, for while agriculture contributed 31 per cent in Ontario and 37 per cent in Quebec to the total net production of each province in 1920, it contributed only 21 per cent and 20 per cent respectively in 1929.

TABLE 12

Percentage of Total Canadian Net Production in Central Canada for Certain Leading Manufacturing Industries (a)

—	1926	1929		
	Central Canada	Ontario	Quebec	Central Canada
Pulp and Paper	86	32	54	86
Non-ferrous Metal Smelting	53	55	23	78
Central Electric Stations	74	42	33	75
Electric Apparatus and Supplies	99	77	22	99
Automobiles	100	96	....	96
Rubber Tires, etc	97	95	4	99
Machinery	96	72	25	97
Castings and Forgings	90	69	21	90
Railway Rolling Stock	72	23	53	76
Hardware and Tools	98	68	29	97
Agricultural Implements	97	95	3	98
Cigars and Cigarettes	100	14	86	100
Cotton Yarn and Cloth	89	18	75	93
Boots and Shoes	94	36	60	96
Rubber Footwear	100	38	62	100
Clothing, Men's	97	36	61	97
Clothing, Women's	95	56	40	96
Hosiery and Knit Goods	93	72	22	94
Furniture and Upholstering	95	76	18	94

(a) The net production of the above industries constituted 46 per cent of the net manufacturing production of Canada; the net production of the above industries in Central Canada was 41 per cent of the net manufacturing production of Canada.

The service industries, including transportation, trade, and finance as well as the "service" industries (personal, professional, governmental, etc.) as classified by the Dominion Bureau of Statistics, increased in importance during this decade and particularly in Central Canada. Of the total gainfully occupied in Ontario and Quebec in 1931, 40 per cent were in these industries, almost double the proportion in manufacturing or in agriculture. A large proportion of the increase in gainfully occupied persons between 1921 and 1931 went into these industries. Thus in Ontario of an increase of 238,000 gainfully occupied, only 10,000 went into agriculture, 6,000 into mining, 16,000 into manufacturing and 13,000 into construction. In contrast 37,000 entered transportation, 17,000 trade, and 73,000 into "services" as narrowly classified. This trend is the result of growing economic specialization, greater urbanization, the rise of the automobile and truck, and the development of the tourist industries. The trend was more pronounced in Central Canada than in the other regions as shown by the following percentages showing the regional distribution of gainfully occupied persons:—

Services

—	Maritime Provinces	Central Canada	Prairie Provinces	British Columbia
1911	10·8	62·6	18·0	8·6
1921	10·1	61·8	19·7	8·4
1931	8·0	63·5	19·5	9·0

All Other Industries

—	Maritime Provinces	Central Canada	Prairie Provinces	British Columbia
1911	12·3	59·6	20·9	7·2
1921	11·4	59·3	23·0	6·3
1931	9·5	58·9	24·4	7·2

9. The Growth of Metropolitan Areas

Regional and industrial shifts as well as the effect of forces conducive to the growth of large urban areas were reflected in the shift of population toward large cities. The proportion of the population living in urban municipalities increased from 49·5 per cent in 1921 to 53·8 per cent in 1931, and the increase in urban population accounted for 77 per cent of the total Dominion increase. The greater concentration was predominantly in cities over 100,000, the proportions of total population in these centres being 18·9 per cent in 1921, and 22·4 per cent in 1931. Almost half the Dominion increase occurred in six urban areas and almost 40 per cent in the metropolitan areas of Montreal, Toronto, and Vancouver.

Percentage Increases in Population, 1921-1931

Montreal Island	38
York (Toronto)	32
District 6, B.C. (Vancouver)	48
District 4, Manitoba (Winnipeg)	24
Wentworth (Hamilton)	24
Essex (Windsor)	56
All Urban Population	28
Total Dominion Population	18

These high rates of increase were associated with greatly enlarged financial and other services and with concentration of certain types of manufacture. In the case of Vancouver the increased importance of the port and its widening hinterland were dominant influences. No obvious measures of the growth of services in these urban areas are available but some rough indication of the localization of manufacture about these large markets can be given. Certain industries, of course, of which the pulp and paper and central electric station industries are obvious examples, are drawn to their resources. In 1920, the value of net production of manufactures in the six urban areas listed above was 52 per cent of the value of net production of manufactures (less that of the pulp and paper and central electric station industries) throughout the Dominion. In 1929 the percentage was 56 per cent. There was a similar increase in the proportion of capital invested in manufacturing in these areas. Montreal in particular contributed to this increase. This tendency was in line with the tendency toward greater interdependence and also with the tendency, apparent in other countries in the same period, of lighter manufacturing industries to locate near large urban markets.

10. Tariff Policy

As mentioned earlier, the Canadian tariff was changed during the war period by the addition of 7½ per cent to the general and intermediate rates and 5 per cent to the preferential rates. In 1919 and 1920 this increase was abolished with the exception of one or two items. The great rise in prices up to 1920 had the effect, because of specific duties, of lowering the average *ad valorem* equivalent of the duties. The direction of this change is indicated by the decline in the average *ad valorem* rate of duty on all dutiable commodities from 27·4 to 20·6 per cent between 1914-1915 and 1920-1921. (This is not, however, an accurate measure of the quantitative significance of the change.) With the fall of prices the percentage rose in 1922-1923 to 24·9 and was 24·3 in 1929-1930.

No attempt was made at a general tariff revision until 1930 but a number of significant changes were made in individual items. In 1919, 1922, and 1924 substantial reductions were made in the duties on farm machinery. Thus the rates on tillage implements which had, under the 1907 tariff, been 12½, 17½, 20 per cent, were raised by the war-time increase to 17½, 25, 27½ per cent. Subsequent preferential, intermediate, and general rates were:—

1919	10%	15 %	15 %
1922	10%	12½%	12½%
1924	Free	7½%	7½%

Harvesting machinery, which had, under the 1907 tariff, been dutiable at rates of 12½, 17½, 17½ per cent had had a reduction in 1914 to 12½, 12½, 12½ per cent. Subsequent rates were:—

1922	7½%	10%	10%
1924	Free	6%	6%

Rates on agricultural implements, n.o.p., had changed as follows:—

1907	15 %	22½%	25 %
1915	20 %	30 %	32½%
1919	12½%	20 %	20 %
1922	10 %	15 %	15 %
1924	5 %	10 %	10 %

The producers of farm machinery had been relieved by being granted drawbacks on a portion of the duties paid on materials and in 1924 by reduced rates of duty on materials imported.

An even more complicated device was used to effect in 1926 a reduction of duties on automobiles. Since 1907 the rates of duty on all automobiles had

been 22½, 30, 35 per cent. In 1926 rates on the less expensive automobiles were reduced to the following rates:—

Retail Value not more than $1,200
12½% 17½% 20%
Retail Value more than $1,200 but less than $2,100
15% 25% 27½%

Relief was given to the manufacturer by admitting specified parts not made in Canada free of duty and granting a drawback on others of 25 per cent of the duties paid, provided that 50 per cent of the value of the automobiles produced was "Canadian content." The history of protection to the automobile industry is an illustration of tendencies in Canadian manufacturing (excluding processing)—protection in the home market against finished United States products, access to the United States market for specialized materials at low rates of duty, protection for most of the export trade under preferential agreements with Empire countries.

The tariff changes of May, 1930, which were in effect only till September of that year do not require comment except to point out the adoption of an old device of making tariff reductions by means of an extended British preference and the substantially increased protection given to the primary steel industry above the level which existed when the iron and steel bounties expired in 1910.

A significant change of regional importance was made in 1923 when a reduction of 10 per cent of the amount of the preferential rates was granted where imports were shipped direct to Canadian ports. Certain commodities were excluded from this provision and it did not apply to items carrying a rate of 15 per cent or less. It was however important for Maritime ports and Montreal in their competition with New York. In 1926 the policy was extended to make not only the 10 per cent reduction but also the application of preferential rates dependent on direct shipment to Canadian ports. The extension was in conformity with the general policy of using the tariff to promote traffic by all-Canadian routes.

During the period also the trade treaty policy was extended. Limited lists of commodities were covered by treaties with France, Italy and Belgium. For the fiscal year, 1929-1930, of dutiable imports amounting to $819 million, goods to the value of $613 million were imported under general rates, $147 million under preferential rates and $59 million under treaty rates.

11. Transportation Policy

The completion of the Hudson's Bay Railway (1929) and the New Welland Canal (1913-1932) and the further development of harbours were the results of Dominion transportation policy on its developmental side. The costs were borne by the Dominion as a whole, though to a marked extent the expenditures were made in response to regional pressures and agitation. The expenditures were designed to aid the export regions, particularly prairie grain export and to increase the terminal and shipping facilities of ports in the Maritime Provinces, Quebec, and British Columbia. The expenditures, including loans, guarantees, and subsidies, made between March 31, 1922, and March 31, 1937, and the total expenditures up to March 31, 1937, are given below:—

—	1922-1937	Accumulated Total to March 31, 1937
	$000,000	$000,000
Harbour Improvements and Dock and Terminal Facilities	165	272
River Improvements	44	73
Canals	104	243
Railways	955	2,897

Post-war readjustments in railway rates were strongly in the direction of regional equalization except that rates below the scale of the central territory were restored to the Maritime Provinces. Railway rates generally had, according to the weighted index of the Dominion Bureau of Statistics, been increased from a level of 67·45 in 1914-1915 to one of 124·89 in September, 1920. As mentioned earlier these increases had tended toward equalization. Eastern rates had increased by 111 per cent, Western rates by 69 per cent, and Transcontinental rates by 67 per cent. By 1926 the general freight rate index had fallen from 125 in 1920 to 100. The reduction in rates on agricultural products had been from 145·6 in 1920 while the reduction on manufactures and miscellaneous goods had been from 119·3 (1926 = 100). These compare with reductions in prices (1926 = 100) from 156 for wholesale prices generally, from 157 for manufactured goods, and from 124 for the cost of living. Railway rates, therefore, had not been reduced as much as prices but the relationships were favourable in comparison with those of the pre-war period.

The downward adjustments of freight rates up to 1927 had the effect of improving the position of British Columbia, and the Prairie Provinces, as against the central territory of Ontario-Quebec. Following general reductions in 1921, the increases in rates since 1916 stood at 96 per cent Eastern, 56 per cent Western, and 54 per cent Transcontinental rates. In 1922 the Crow's Nest Pass Agreement rates were re-established for grain and flour moving eastward from the prairies. The 14 cent rate of 1897 from Winnipeg to Fort William was re-established, though not the 10 cent rate resulting from the Manitoba Agreement.[21] The lower rates on commodities moving to the prairies were not, however, re-established. In the same year a 7½ per cent decrease was made on basic commodities. That is, the 1920 increases of 40 and 35 per cent had, by successive decreases, been reduced for these commodities to 17½ per cent in the east and 12½ per cent in the west. Of particular importance to British Columbia in this reduction, which included "forest products," was the provision that in calculating Pacific Standard rates from Prairie rates the mileage should be multiplied by one and a quarter instead of one and a half as formerly. From 1894 to 1914 the ratio had been 2 to 1.

A voluntary reduction in 1922 of 20 per cent on grain and grain products from prairie points to the Pacific coast was followed by a further reduction on order in 1923 of 10 per cent. In 1925 a further reduction (estimated at 5 per cent) was ordered to bring these rates into conformity with the Crow's Nest Pass Agreement rates on grain and grain products moving eastward. In computing the rates the mileage of Canadian National Railways, Edmonton to Vancouver (766 miles) was used as the basis for Calgary to Vancouver rates (642 miles by Canadian Pacific). In 1927 by order main line rates on grain to Vancouver were extended to all branch lines and grain rates from Fort William to Quebec were reduced by about 47 per cent to put that port on an equal basis with Montreal in accordance with the spirit of the National Transcontinental Agreement of 1903.

By readjustments of rates between 1913 and 1923, Maritime rates generally had been brought up to the level of Ontario-Quebec rates—a change which was a serious disability in a difficult period of readjustment. The protest of the Maritime Provinces was referred to the Maritime Claims Commission and following its report, the Maritime Freight Rates Act, 1927, provided that rates within the territory east of Levis and Diamond Junction should be reduced 20 per cent. On traffic moving westward out of the territory the 20 per cent reduction was to apply to the eastern portion of the rate. The reduction was not to apply, however, to traffic moving into the territory. In other words "exports" from the territory received the advantage but against "imports" from the rest of Canada into the territory the higher transportation protection remained. The reductions of rates so made do not bear on the railways as provision was made in the Act for reimbursing the railways for the difference between "normal" and "statutory" rates. Up to March 31, 1937, the Dominion government has reimbursed the railways under the Act to the extent of approximately $25 million.

Some indication of the extent of railway rate equalization, as it applied to class rates, may be obtained from a comparison of the percentage relationships in the various traffic territories of Fifth Class Maximum Standard Mileage Rates for a distance of 400 miles. The selection of this class and distance is quite arbitrary and the intention is merely to show simply the direction of changes. In 1914 Pacific rates were 77 per cent; Saskatchewan-Alberta rates 49 per cent; and Manitoba rates 37 per cent above Ontario-Quebec (Central) rates while Maritime rates were 17 per cent below Central rates, having previously been as much as 40 per cent below. By 1923 Pacific rates were 32 per cent and Prairie (Manitoba-Saskatchewan-Alberta) rates were 14 per cent above Central rates while Maritime rates were equal to Central rates. In 1927 Maritime rates were reduced to approximately 20 per cent below Central rates.

In addition to these changes, numerous changes in commodity rates (which cover the bulk of railway traffic), particularly those affected by Panama Canal competition, had modified the general structure. The whole history of railway rate regulation, whether by statute or by decisions of the Board of Railway Commissioners or the Canadian Privy Council, has been a history of attempts to reduce differences (the Maritime Freight Rates Act was an exception) and to promote traffic between regions even at the expense of the Dominion purse.

12. Recapitulation

The phenomenal expansion of production in the period 1925 to 1929 exhibited in Canada a familiar pattern. Favourable demand and improved tech-

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[21] See above, IV, 7.

niques of production resulted in a great expansion of exports and a still greater expansion of imports. Following the increase in exports came a great increase in home investment and a rise in the national income. These changes were accompanied, in contrast to previous periods, by a sufficient rise in Canadian savings to exceed the home investment and reduce net external debts.

The different regions shared in different degrees in this expansion. Ontario, Quebec and British Columbia shared more than proportionately in the rise in the national income. The income of the Prairie Provinces rose rapidly until 1928 but the poor yields of 1929 resulted in a decline. The long post-war depression in the Maritimes was overcome and the income of the region grew steadily after 1926 at about the same rate as for the country as a whole.

The world expansion of this period was on a base rendered precarious by reason of the dislocations in world trade, the political tensions amid which the expansion took place, and the inordinate expansion of credit which flowed out from the United States and other creditor countries. Within Canada itself there were certain definite weaknesses. The position of wheat demonstrated its instability some time before the crisis. The post-war readjustment in wheat had been postponed but not averted. Coincidence of heavy yields in Europe and America was the occasion for drastic declines in wheat prices, and wheat and flour accounted, as before the War, for more than one-quarter of Canadian exports. Production of newsprint had increased more than threefold between 1920 and 1929 and despite phenomenal increase in demand during the boom the price was sagging from 1922 on. In a too rapid expansion the industry, which is characteristically one of heavy overhead costs, had assumed a peculiarly rigid financial structure. Under the particular circumstances of the time, the price of its principal product was extremely vulnerable. The increasing importance of the automobile industry gave another expanding source of income which was liable to sharp contraction should a depression be encountered. Increased proportions of the gainfully occupied population had been drawn into the construction industry, the service industries, and into unskilled trades generally. They had been drawn from less to more vulnerable positions.

There were important elements of strength in the increasing importance which new resources and improved methods had given to the gold mining and base metal industries. In the latter case, the strong upward trend was, however, associated with an extreme variability in price. There was ultimate strength also in the greatly extended electric power development.

In short, the position was characterized by a high national income which was dependent on the maintenance of exports, the chief of which were subject to wide variations in price and of which the two major ones were in weak positions. The high national income was also dependent to a marked degree on a high rate of capital investment which was not likely to continue undiminished even apart from the world crisis. The counterpart of this was the drawing of larger proportions of the population into peculiarly vulnerable occupations such as that of unskilled workers in the construction industry. To these must be added an increased rigidity in private finance because of a greatly increased proportion of bonded indebtedness. Further, from 1921 to 1930 about 18 per cent of the national income was being diverted to government expenditures which are in general less flexible than private expenditures. Nearly 6 per cent of the national income was required during this period to meet government debt charges. While these were but transfers of income they constituted rigid elements in expenditure for some groups and rigid elements of income for others. To meet this rigid requirement governments were dependent to a high degree on the maintenance of imports as the basis of customs revenue (over 40 per cent of total Dominion receipts in 1929 and 1930) and on the continuation of a high rate of investment. Thus these inflexible elements in the flow of Canadian income were to force disproportionate reductions in flexible incomes when the total national income contracted while government finance was to be under critical strains from falling revenues and intractable expenditures.

THE COURSE OF DEPRESSION AND RECOVERY, 1929-1938

1. The World Depression and Recovery

The Great Depression, which began with the crisis of 1929, was the second violent post-war readjustment throughout the world. Evasion and postponement of fundamental readjustments in the 20's and the adoption of wrong political and economic policies increased its violence and magnitude to unprecedented proportions. The very magnitude and speed of the decline generated elements of panic and fear which still further intensified its violence.

As has been pointed out with specific reference to Canada, readjustments in the economic world had been made by 1925 which were superficially and temporarily successful. Even aside from such refractory problems as reparations and inter-governmental debts, certain adjustments of crucial importance, however, had not been made.

The world had not accommodated itself to certain great shifts in production. The maladjustment which underlay the agricultural crisis is described below. This was but the greatest of a series of maladjustments associated with the increase of manufacturing in the Orient and other non-European countries, the economic disruption of the Danubian Valley, the abnormality of production and trade in Germany, and the isolation and disorganization of Russia.

In most countries, though not in the United States, interest rates were much higher than before the War. At these rates there flowed abundant capital from the creditor countries and debts were piled up at an enormous rate. To a greater extent than formerly new investment created debts (bonds) rather than ownership (shares). Financial structures were by this increased "leverage" rendered highly unstable in the face of income fluctuations.

It is generally recognized that, in the re-establishment of the gold standard, the United Kingdom (1925) gave too high an external value to the pound while France (1928) set too low an external value on the franc. Aside from the handicap which this imposed on Great Britain's export industries, already subject to severe pressure by reason of shifts in markets and competitive conditions, it had the unfortunate effect of preventing the world's most experienced creditor nation from taking the lead. New York and Paris, decidedly inexperienced, enjoyed a freedom which was denied to London, the most highly organized of the capital markets. Though she continued with some difficulty to lend long-term capital in countries where prospects of earnings were higher than at home, the high short-term rates of interest necessary in Britain for the maintenance of her exchanges attracted foreign deposits liable to be withdrawn at the first suggestion of insecurity.

The United States emerged from the war period as the world's greatest creditor, a position which her experience did not enable her to fill while her traditional prejudices were a positive disqualification. Her position required that as a creditor she should accept goods and services from her debtors in payment of interest, or provide by increased lending abroad the foreign exchange to meet these interest payments, or do both. Dependence exclusively on either the first or the second option was likely to provoke violent repercussions both at home and abroad. In the event, the United States in part chose and in part was assigned the second of these alternatives. In 1921 and 1922 she raised the tariff barriers against an impending increase of imports, and later added to her equipment the inappropriate and ill-conceived instrument of a tariff adjustable by executive order. The effect of this instrument was in the direction of offsetting the efforts of debtor nations to build up the export surpluses necessary to the meeting of interest payments in the United States. The resultant difficulties of her debtors and of other creditor nations were enhanced by an almost revolutionary improvement in the technical efficiency of United States industry—an improvement which would have justified a reduction rather than an increase in the United States tariff and flexibility of trade rather than flexibility of tariffs. The accumulation of savings out of a greatly increased national income gave to the United States rates of interest in the 20's "fully one per cent *lower* than before the War

whereas Great Britain had to adjust its economic system to a rise in the rate of interest by one-half."[22] These low rates of interest in the United States, in the face of the scarcity of capital in Central Europe and South America and in the face also of the great war-time extension of the bond-buying public, provoked an export of capital—temporarily stimulating—but disturbing in its magnitude and postponing ultimate readjustment. The easy-money policy of the United States in 1927, adopted with the entirely well-intentioned purpose of easing the strained position of Britain not only gave fresh stimulation to capital investment in the United States and elsewhere; it promoted, through reduced interest rates and increased capitalization multipliers, a frenzied acceleration in the upward revaluation of United States securities and property ("equities"). When it had gathered its full momentum, the stock market boom of 1928-1929 by its speculative demands for credit decreased and offset the capital export by which the temporary world adjustment was being made. The inordinate emphasis on monetary expansion and on capital export as a means of international adjustment had postponed the fundamental realignments of production and trade and magnified the ultimate collapse.

The world depression which followed bore a family resemblance to previous depressions but was peculiar in its magnitude and in its incidence.

Perhaps its most important peculiarities resulted from the coincidence, partly fortuitous, partly inevitable, of an agricultural with an industrial crisis. Whether the agricultural crisis would have occasioned collapse in any case is debatable but the coincidence was a major factor in the magnitude and the direction of the depression. Reference has already been made to the shift in wheat production. Initially the result of war-time changes, this shift from European to overseas production was economically justified by reduction in production costs in subhumid grassland areas. In the early post-war period it was not only encouraged by impairment of European production and lower shipping rates but facilitated by lower European tariffs. In 1913, 24 per cent of United States wheat exports went to countries imposing duties of over 35 cents per bushel. Of much larger exports in 1922 virtually none encountered duties of this height.[23] After 1925 Europe turned to agrarian protection as in the last two decades of the nineteenth century. Germany, Austria, and Czechoslovakia imposed wheat duties and Italy inaugurated "the battle of the grain." By 1929, of the importing countries of Europe all but the United Kingdom, the Irish Free State, Belgium, and the Netherlands imposed substantial duties on wheat. Under this protection, European countries had exceeded their pre-war production and, though the outside world paid little attention, Russia was applying the new agricultural methods and machinery to the recovery of her pre-war position as a wheat producer. Only the speculative accumulation of stocks by those who mis-read the signs, maintained prices in 1929 following the large world crop of 1928. There was probably not at that time a serious over-production but the industrial crisis and the reappearance of Russian exports precipitated the agricultural crisis.

Once the catastrophic decline in vegetable food prices began, it was communicated to all agricultural prices and drove those food-importing countries which were also large producers in a panic to unprecedentedly extreme protective measures. By 1932, France, Germany, and Italy were paying for home-grown wheat more than two and a half times the Liverpool price for overseas wheat. Such high prices tended not only to increase the protected production but also to curtail consumption of wheat and of other foodstuffs.

With the onset of the industrial crisis catastrophic declines also occurred in the prices of non-agricultural raw materials. As a result world production of these had declined by 1932 by about 25 per cent of the 1925-1929 level.[24] World wheat acreage, however, increased in the face of lower prices, though the main increases were in the highly protected European countries. The reduction of accumulated stocks depended on crop failure rather than acreage reduction. Even in the export countries where the full impact of the fall of prices was felt, acreage at first tended to increase as producers, lacking alternative employment, endeavoured to increase their fallen incomes by increased outputs.

The economic facts bearing on wheat—the inelasticity of demand, the maintenance by trade

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[22] Ohlin, *International Economic Reconstruction*, Carnegie Endowment for International Peace and International Chamber of Commerce, Paris, 1936, p. 41.

[23] *World Trade Barriers in Relation to American Agriculture*, Washington, Seventy-third Congress, Senate Document No. 70 (1933), cited in *Agricultural Protectionism*, Economic Committee, League of Nations, Geneva, 1935, pp. 15-16.

[24] *World Production and Prices, 1935-36*, Economic Intelligence Service, League of Nations, p. 11.

barriers of high prices to consumers in the face of low prices to producers, the substantial and relatively rigid transportation and processing costs intervening between the export producer and his consumer market, and the lack of alternatives to wheat production for important export regions—these made even very great declines in price of little effect in promoting a balance between consumption and production.

The agricultural crisis was perhaps the most severe and (after the event) the most refractory element in the Great Depression and in its impact on Canada nationally and regionally was direct and disastrous.

A second feature of the Great Depression, peculiar in its magnitude and of especial significance to Canada, was the great contraction of international trade. By the spring of 1933 the quantum of world trade had fallen 28 per cent, gold prices 52 per cent, and the total value 65 per cent from 1929. The fall in prices had been greatest in raw materials; the fall in quantities had been least in foodstuffs and greatest in manufactures. Except in raw materials the fall in the quantum of world trade had been much greater than the fall in world production.

Though a decline in international trade was an expected feature of depression, so great a fall in comparison with production was an automatic result of the maintenance of the prevalent specific duties, which were rapidly becoming more onerous in a period of falling prices, reinforced by the multiplicity of extreme protective measures taken by countries in the endeavour to shield producers from the full impact of the collapse. Though *autarky,* or economic self-sufficiency, later became an end of policy in itself in some countries and though some ingenious arguments were found to favour a lower relative importance of international trade, the initial swing or scramble to protectionism was a policy of *sauve qui peut.* It could yield the desired results only if restricted to a few small countries. With practically all nations participating, it intensified the depression and biased it in a special direction. The creation of new vested interests and increased international tension transformed a panic-driven protectionism into a calculated movement toward economic nationalism. New trade arrangements were almost wholly of a limited bilateral type and were often preferential and discriminatory in form, giving trade restrictions new directions rather than reducing them.

In pre-war depressions, when free-trade Britain was overwhelmingly the most important creditor nation, the relative freedom of trade or at least stability of trade barriers, and the willingness of the creditor to lend and by a liberal trade policy in effect to accept goods in payment, gave a flexibility to world economic relations and a space for readjustment which were sadly lacking in the depression starting in 1929. In the period, 1930-1932, the United States, Great Britain, and France, the important creditor countries, increased trade restrictions and thus not only intensified the contraction of trade but threw a greater share of the strain of contraction on the debtor countries exporting food and raw materials. The terms of trade, the rates at which exports exchanged for imports, changed by much more than was justified by technical improvements in food and raw-material production and swung sharply adverse to such countries. Canada, drawing about one-third of her national income directly from exports of goods and services (predominantly raw materials and slightly processed products) was profoundly affected by these conditions.

It is not necessary to attempt any detailed explanation of the origins and course of the monetary and financial crises which marked the down-swing of depression. Exchange relationships and monetary standards proved unstable in the face of wide dislocations of production and trade. Differentials between countries in interest rates, financial nervousness bred by experience of war and inflation, and instability in certain money markets had created by 1929 a large amount of short-term funds certain to intensify any panic and to break down monetary standards. Monetary and credit crises, extending from the collapse of the Kreditanstalt in May, 1931, to the banking crisis in the United States in February, 1933, intensified the downward spiral of liquidation and deflation and the precipitous fall in prices.

The depression was marked by instability not only, as would be expected, in debtor countries but in the creditor countries as well. London, with her currency over-valued in relation to her cost structure and with her abnormal short-term balances, had little strength to extend help and her efforts to maintain credit in Central Europe resulted in herself being compelled to abandon gold. New York was hampered by lack of experience, weakness in the domestic banking situation, and an extreme lack of confidence which culmin-

ated in the banking crisis of February, 1933. Paris, at first in a seemingly strong position, found her position undercut by the depreciation of the pound and the dollar. Inability and at times unwillingness of the creditor countries to relax credit and ease the position of the debtor nations were further world-depressing influences.

The result was a decline of prices much more than cyclical in magnitude. It was a downward shift, comparable to that following 1873, and likely in default of positive measures to persist through more than one business cycle. In the Great Depression of the late nineteenth century, however, Canada had been favoured more than competitor countries by falling transportation rates and her competitive position strengthened. After 1929 the reverse, rather, was true.

The downward shift of prices brought about a particularly violent decline in the export prices of raw-material producing countries, on which the greatest initial impact of a price decline usually falls, and enormously increased the real burden of debts in those countries, resulting either in default or in disproportionate reductions in exposed incomes. Because of the magnitude of the price dislocations and particularly when London itself was forced to allow the pound to depreciate, debtor countries successively were forced to abandon their old exchange standards. This had been a familiar accompaniment of severe depressions but never had there been such wholesale modification of exchange parities.

By the spring of 1933, following the United States crisis, it was clear that the tide of deflation had turned. Indeed industrial production had begun to increase in the United Kingdom in the latter part of 1931. As the number of countries able to undertake expansionist credit policies multiplied, recovery widened. Its strength was greatly increased by the credit and income expansion initiated by the United States after the devaluation of the dollar. Recovery lagged in the gold-bloc countries where deflation was the only policy consistent with the maintenance of the gold value of their currencies in the face of depreciation elsewhere.

After 1933 both the quantum and value (in national currencies) of world production rose. Manufactured goods rose in quantity (from a low level) rather than in price; raw materials rose more in price than in quantity produced, while world stocks were reduced; foodstuffs increased in price but not significantly in quantities produced. The quantum of world trade rose slightly but export values in depreciated currencies rose substantially. The increase in the quantum of trade was entirely in manufactured goods and raw materials; that of foodstuffs declined. Recovery in the major countries was initially focussed on increased purchases of durable consumers' goods—building and, to a much smaller extent, automobiles in Great Britain and automobiles in the United States. The progressive deterioration of existing supplies, the decline in the rate of interest, and the gains made in real income by the employed population because of the great decline in food prices were factors determining the direction of recovery. As between the two countries, taxation was a greater deterrent to new expenditures on building in the United States and to those on automobiles in Great Britain. In contrast to the United States building boom culminating in 1929, Great Britain had not succeeded in the 1920's in making good her shortage of housing, particularly in the southern areas. Increases in the demand for and prices of the raw materials of these products, and increases in employment, were direct results. Export values rose sharply in raw-material producing countries. In the wake of revived demand came the resumption of investment, at first mainly in inventories rather than fixed capital, and the spread of recovery to more industries.

To this recovery movement, which appeared to be reaching its limits in 1935, was added the armament boom which has been economically a world spending program. Under its influence recovery accelerated rapidly until the American recession of 1937-38 was encountered.

Recovery of food prices was occasioned mainly by reduced production resulting from crop failure with some assistance from the United States Agricultural Adjustment Administration. The agricultural crisis was eased temporarily and fortuitously.

2. Depression and Recovery in Canada

Approximately one-third of the Canadian national income is derived directly from exports. The importance of the indirect effects of this factor cannot be measured in any quantitative way but may be indicated by the relation of its movements to the behaviour of the economy as a whole. In Chart II the relative movements of the value of exports, the national income,[25] con-

[25] 1921-25, Bank of Nova Scotia estimates, 1926-36 estimates prepared by the Research Staff of the Royal Commission on Dominion-Provincial Relations.

struction activity, and employment are shown for the years 1921-37. Following the post-war depression, exports rose sharply until 1925 and maintained a high level until 1929. Construction, employment, and hence the national income did not rise substantially until the basis of rapid expansion had been laid by a high level of exports. A high rate of investment ensued which supported the national income while exports declined following the short crop of 1929. During the depression exports fell more quickly than the national income but recovered earlier and rose more rapidly thereafter.

Canada, because of her dependence on exports, was quickly drawn into the world depression. Drastic decline in the receipts of the export industries was closely followed by the drying up of investment and the decline of employment in the manufacturing industries. The extent to which the decline in employment was a later phase of a depression communicated by a fall in the prices of exports is made clear by the following indexes quoted from the Final Report of the National Employment Commission (p. 22):—

—	Export Prices (1926 = 100)	Employment in Manufacturing Industries (1926 = 100)
1929—July	101·9	120·3
October	95·9	120·2
1930—January	90·2	106·5
April	81·0	111·3
July	73·1	111·3
October	62·8	107·8
1931—January	52·4	93·7

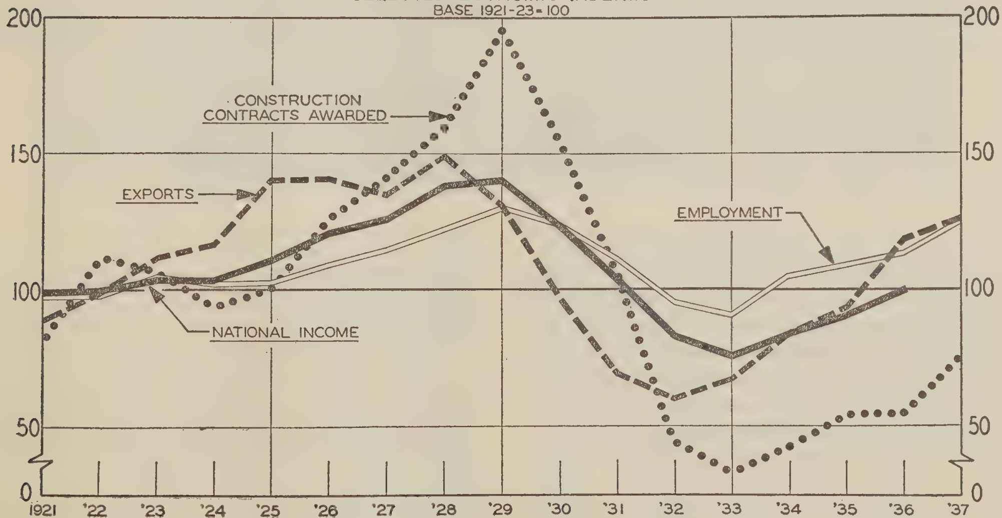
The greatest relative decline in construction occurred in 1931 and 1932. This decline came when the full effect of the fall in export incomes was felt and when a series of international panics shattered confidence in the future. It was retarded somewhat by the public works employment programs of 1930 and 1931. From 1929 to 1931, exports declined more rapidly than the national income; from 1931 to 1933, because of the rapid decline of investment, the national income fell more rapidly than exports.

The serious disequilibrium of Canadian prices and costs and the altered relationships of important groups in the economy arising from the impact of external influences and certain national policies are indicated by a number of important price

CHART II

SELECTED ECONOMIC INDEXES

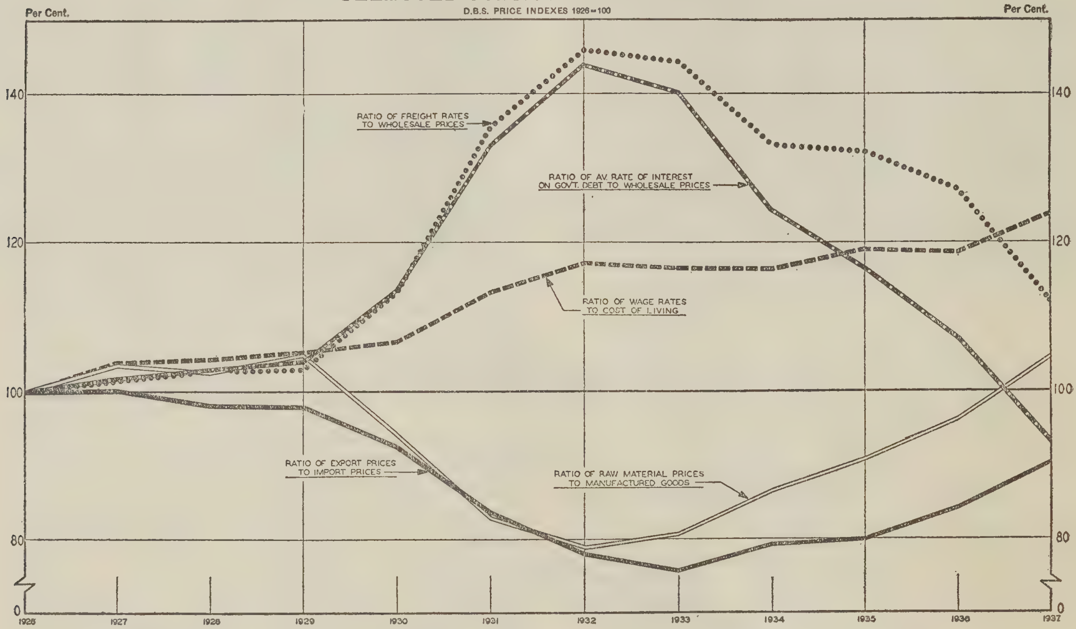
BASE 1921-23 = 100



relationships on Chart III. Export and raw-material prices fell rapidly while important elements of cost remained rigid. With respect to the degree of disparity shown on this chart certain qualifications arising out of the lack of better records should be noted. The index of wage rates used in the ratio of wages to the cost of living is predominantly an index of rates in the skilled trades which remained more stable than the level of wages in general. The freight rates component of the freight rates-wholesale prices ratio is an index of railway freight rates and does not include truck and water rates which declined sharply during the depression. In the index of export prices in the export-import prices ratio, sufficient weight is not given during the later years of the period to the prices of the increasingly important exports of gold and other non-ferrous metals. Finally, in the ratio of the average rate of interest on government debt to wholesale prices, the former is the average rate on the existing direct and guaranteed debt including treasury bills of the Dominion and the provinces but does not include municipalities. These qualifications do not affect the condition illustrated but rather the extent of the movements. The disparities shown, indicate the nature of the problem which confronted the export and raw-material producing groups and regions during the depression and its consequences for the other groups and regions in the country. Rigid costs in so far as they could not be met resulted in defaults, accumulation of debt, and increased government expenditures. The decreased purchasing power of the exporters as contrasted with the more slowly falling wages and prices of manufactured goods contributed to unemployment and relief costs in industrial areas. The real incomes of the fixed-income receivers and employed wage earners, particularly in the service and manufacturing industries, rose and a larger share of the national income was diverted to those groups and the regions in which they are concentrated. The national money income declined from an index number of 116 (1926 = 100) in 1929 to 64 in 1933 but the national real income declined only from 116 in 1929 to 83 in 1933. Because of the differing rates at which prices and incomes declined and the unequal incidence of unemployment, much more than a proportionate share of the loss of real income fell on particular groups. The brunt of the decline fell on the export and capital-goods industries, on unemployed wage earners, and on receivers of non-contractual property incomes.

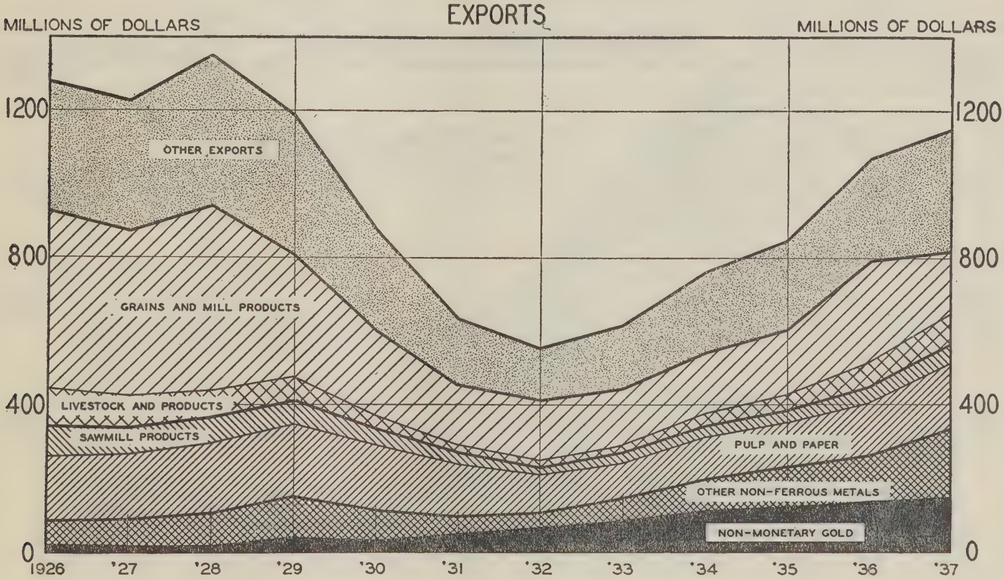
CHART III

SELECTED PRICE RELATIONSHIPS



The declines in the main exports of regional importance are shown in Chart IV. The exports of agricultural produce from the prairie region, which had been the chief stimulus to Canadian expansion, fell sharply in the face of falling prices, contracting markets, and drought. Although prices of farm products improved after 1932 the other conditions did not change substantially and the recovery in the value of exports has been slight. On the other hand better techniques, improved competitive positions in foreign markets, new discoveries, the increased price of gold, Empire preferences, and the more fortuitous circumstances of a British building and a world armament boom non-ferrous metals and forest products contributed less to the carrying of the national overhead of transportation, distribution, and manufacturing facilities than a similar improvement in the exports of agricultural produce would have done. Despite the rise in exports and the reduction in interest rates, investment (except that immediately associated with the mining industry) lagged. Nevertheless the importance of the expanding exports in furnishing foreign exchange, in providing new employment, and in making possible at least in part the transfers of income necessary to maintain certain groups and areas must not be minimized.

CHART IV



brought the newer exporting areas of Northern Quebec and Ontario, and British Columbia to the fore. The total of the exports of gold, other non-ferrous metals, pulp and paper, and lumber was considerably greater in 1937 than in 1929 and in large part filled the gap left by the shrunken exports of agricultural produce. The total of all exports in 1937 was nearly as large as it had been in 1929 and the disparity between export prices, import prices, wholesale prices, and the cost of living had virtually disappeared. Because of its unevenness this recovery was less of a solvent of the country's economic problems than might have been expected. The increase in the exports of

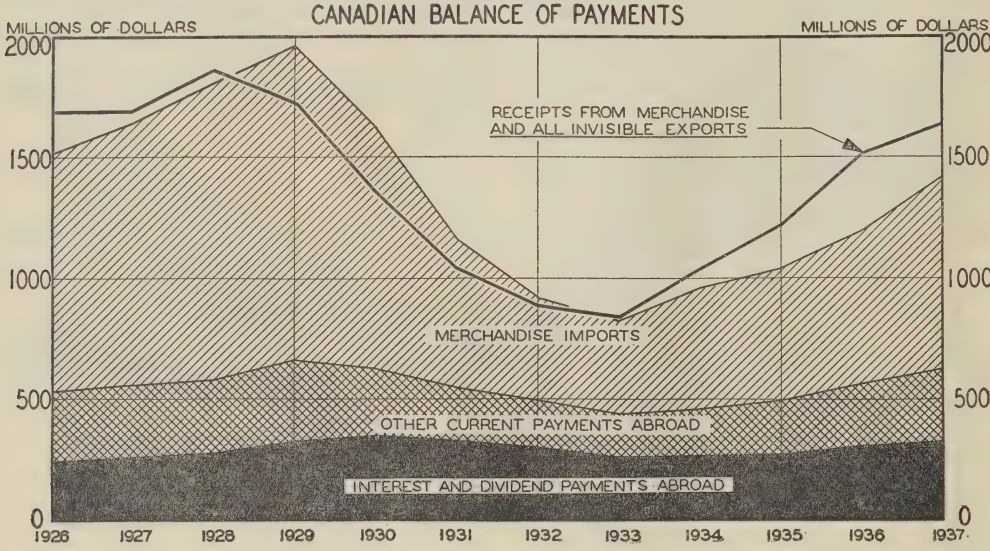
The movements and the relative importance of the chief items in Canada's balance of payments during 1926-37 are shown in Chart V. The shaded portion represents the total payments abroad for merchandise, services (freight, insurance, etc.), interest, and dividends. The line marked "Receipts from Merchandise and all Invisible Exports" shows the total receipts from foreigners and includes payments for exports, tourist expenditures, interest on investments abroad, etc. The area between the shaded portion and the line marked "Receipts from Merchandise and all Invisible Exports" represents net capital imports (shaded part) or net capital exports (unshaded part). Canada, in contrast to

Australia and Argentina, was a net capital exporter during 1926-1928 and at the beginning of the depression was a relatively small capital importer. This condition was a source of strength in the Canadian situation whereas the reverse case in the other two countries was a serious weakness. The net capital imports into Canada during 1930 and 1931 eased the difficulties arising out of the rapid fall in exports. Incidentally it helped to maintain the exchange. After 1930 merchandise imports fell more rapidly than merchandise exports and equilibrium on the whole balance of payments was achieved in 1933 with virtually no net capital movements. Chart V shows the importance of the heavy fixed charge on the Canadian economy arising out of the relatively stable payments abroad for interest and services. Practically all the adjustment to a severe contraction of exports was made by reducing merchandise imports. This had important implications with respect to foreign trade policy, foreign exchange policy, and Dominion government revenues from customs duties. After 1933 exports rose more rapidly than imports owing to the slow recovery of income in Western Canada, the effects of the tariff, and the nature of the income derived from the expanding exports. (A substantial portion of the income from the exports of metals consists of profits, a large part of which is paid to foreign shareholders or used for purposes of investment.) A considerable part of the increased foreign credits available since 1933 was used for the redemption of foreign debts.

The effects of the fluctuations in exports, of drought, and of the maladjustments in prices and costs which characterized the depression, are most completely summarized by the behaviour of the national income and of the incomes of the various provinces, by the variations in that income, and by its shifts between industrial groups and regions. An entirely new estimate of money incomes has been made for the Dominion as a whole and each of the provinces. (See Table 13.) The estimates presented in Table 13 represent income paid out to individuals in the form of salaries and wages, interest and profit, and the net income of individual enterprisers for whom these constituents cannot be separated so readily. (Individual enterprisers include farmers, fishermen, independent merchants, own account professional workers, etc. The income shown under this category includes all forms of income—wage income, interest, rent and profit—from their respective occupations but not earnings made outside of these occupations.) The estimates represent a considerable improvement over the ones hitherto available in so far as a more thorough effort was made to estimate incomes received from the service industries and agriculture.

CHART V

CANADIAN BALANCE OF PAYMENTS



The method employed makes it possible to show the total income actually received in each province rather than the income produced in that province, some of which is paid to individuals in other provinces or foreign countries.

The relative importance of the constituents of the national income and their variations during 1926-36 is shown on Chart VI. Income from agriculture, payroll in the other primary industries most directly dependent upon exports, and payroll in construction suffered the most severe contraction during 1929-33. Salaries and wages in the service industries and in manufacturing, the one naturally sheltered and the other artificially protected, were more stable. Investment income which includes interest on bonds and mortgages was the most stable of all. Income from equities, however, declined sharply.

TABLE 13—THE NATIONAL INCOME (a)

INCOME PAID OUT TO INDIVIDUALS
(millions of dollars)

—	Salaries and Wages	Invest-ment Income	Individual Enterprisers			Net Dominion Transfer re Pensions and Relief	Municipal Education and Public Welfare	Total
			Agriculture	Other	Total			
	A	B	E	F	C	D	G	H
CANADA								
1926	2,375·1	490·3	728·2	378·8	1,107·0	...	108·3	4,080·7
1927	2,515·8	517·9	698·6	403·2	1,101·8	...	110·7	4,246·2
1928	2,728·7	537·2	820·3	436·4	1,256·7	...	118·5	4,641·1
1929	2,900·5	548·5	691·4	456·0	1,147·4	...	122·2	4,718·6
1930	2,642·2	585·5	399·3	407·0	806·3	...	133·6	4,167·6
1931	2,269·4	542·3	222·6	353·8	576·4	...	136·9	3,525·0
1932	1,850·6	435·8	144·5	290·9	435·4	...	139·9	2,861·7
1933	1,674·9	374·5	173·7	265·9	439·6	...	143·3	2,632·3
1934	1,813·8	380·6	262·2	278·8	541·0	...	143·9	2,879·3
1935	1,984·0	398·8	290·9	301·9	592·8	...	140·9	3,116·5
1936	2,131·9	429·0	390·4	324·3	714·7	...	140·9	3,416·5
1937 (p)	2,436·3	451·4	439·4	364·5	803·9	...	137·8	3,829·4
PRINCE EDWARD ISLAND								
1926	7·3	3·6	9·0	2·4	11·4	...	·3	22·6
1927	7·7	3·9	9·8	2·6	12·4	— ·1	·3	24·2
1928	8·1	4·1	9·3	2·6	11·9	...	·3	24·4
1929	8·6	4·1	8·8	2·8	11·6	...	·3	24·6
1930	8·5	4·5	7·3	2·7	10·0	— ·1	·3	23·2
1931	7·6	4·0	3·5	2·3	5·8	— ·2	·3	17·5
1932	6·7	3·2	2·3	2·1	4·4	— ·2	·3	14·4
1933	6·1	3·0	2·8	1·7	4·5	— ·2	·3	13·7
1934	6·1	3·1	3·5	1·8	5·3	— ·3	·3	14·5
1935	6·6	3·0	3·7	1·9	5·6	— ·2	·3	15·3
1936	6·7	3·3	5·3	2·1	7·4	— ·2	·3	17·5
1937 (p)	7·2	3·5	5·0	2·2	7·2	— ·2	·3	18·0
NOVA SCOTIA								
1926	82·5	16·0	15·7	19·0	34·7	1·2	3·9	138·3
1927	88·5	16·9	17·3	18·4	35·7	1·2	3·9	146·2
1928	99·1	17·5	19·2	22·0	41·2	1·2	4·1	163·1
1929	107·3	17·9	17·6	21·0	38·6	1·1	4·1	169·0
1930	102·0	19·3	18·7	19·0	37·7	·9	4·2	164·1
1931	88·0	18·6	14·4	16·3	30·7	·2	4·5	142·0
1932	69·3	16·0	11·7	13·5	25·2	— ·2	4·8	115·1
1933	63·7	14·2	13·4	12·0	25·4	— ·4	5·1	108·0
1934	72·7	14·3	13·0	13·7	26·7	— ·3	4·9	118·3
1935	79·5	14·9	15·2	15·0	30·2	·2	4·8	129·6
1936	85·0	16·0	16·4	16·7	33·1	·8	4·8	139·7
1937 (p)	97·8	16·6	18·6	19·2	37·8	— ·2	5·0	157·0

(p) Preliminary.

TABLE 13—THE NATIONAL INCOME (a)—*Continued*

INCOME PAID OUT TO INDIVIDUALS
(millions of dollars)

—	Salaries and Wages	Invest-ment Income	Individual Enterprisers			Net Dominion Transfer re Pensions and Relief	Municipal Education and Public Welfare	Total
			Agriculture	Other	Total			
	A	B	E	F	C	D	G	H
NEW BRUNSWICK								
1926	62·5	11·1	19·6	11·2	30·8	·3	3·1	107·8
1927	65·9	11·6	17·2	11·1	28·3	·3	3·1	109·2
1928	68·9	12·0	17·2	12·1	29·3	·4	3·3	113·9
1929	75·9	12·4	16·6	13·1	29·7	·3	3·1	121·4
1930	71·9	12·9	15·6	12·2	27·8	·1	3·1	115·8
1931	62·5	12·0	11·0	10·7	21·7	— ·4	3·2	99·0
1932	50·2	10·6	8·3	8·8	17·1	— ·8	3·2	80·3
1933	47·2	9·6	8·2	8·3	16·5	— ·9	3·0	75·4
1934	51·6	9·8	10·1	8·6	18·7	—1·7	3·0	81·4
1935	54·5	10·2	10·5	9·1	19·6	—1·5	3·1	85·9
1936	58·1	10·6	13·2	10·0	23·2	— ·3	3·6	95·2
1937 (p)	66·9	11·2	13·4	11·0	24·4	— ·7	3·5	105·3
QUEBEC								
1926	598·1	129·2	96·7	88·9	185·6	—4·7	19·4	927·6
1927	628·6	137·5	95·6	94·2	189·8	—5·0	19·8	970·7
1928	675·4	142·0	107·8	100·9	208·7	—5·4	21·1	1,041·8
1929	734·5	143·8	99·7	108·1	207·8	—5·8	21·6	1,101·9
1930	678·2	154·5	83·5	99·4	182·9	—8·5	24·1	1,031·2
1931	582·2	142·6	55·9	88·7	144·6	—13·5	25·2	881·1
1932	472·4	116·1	37·6	74·0	111·6	—14·6	28·2	713·7
1933	427·0	101·7	36·9	67·7	104·6	—14·5	34·0	652·8
1934	455·2	101·8	49·6	68·6	118·2	—14·8	32·6	693·0
1935	498·7	105·8	55·8	73·2	129·0	—16·5	32·3	749·3
1936	540·1	113·7	69·2	78·3	147·5	—12·7	31·8	820·4
1937 (p)	631·9	119·5	78·1	89·6	167·7	—14·7	31·8	936·2
ONTARIO								
1926	947·2	224·0	197·3	138·2	335·5	1·0	45·1	1,552·8
1927	1,013·4	236·6	193·0	150·4	343·4	·8	46·7	1,640·9
1928	1,104·1	246·2	211·3	162·0	373·3	·7	49·1	1,773·4
1929	1,177·5	252·0	204·7	170·5	375·2	·4	52·5	1,857·6
1930	1,065·9	270·1	160·7	153·9	314·6	1·0	59·8	1,711·4
1931	939·1	248·3	108·0	137·8	245·8	—4·4	63·6	1,492·4
1932	767·4	197·3	61·4	113·1	174·5	—4·8	63·1	1,197·5
1933	699·5	169·3	68·3	105·1	173·4	—2·2	63·2	1,103·2
1934	774·2	175·3	84·9	112·3	197·2	—12·7	63·5	1,197·5
1935	845·1	185·7	94·8	121·3	216·1	—12·7	60·5	1,294·7
1936	906·6	201·7	132·0	130·0	262·0	—10·3	60·7	1,420·7
1937 (p)	1,044·4	213·7	153·7	147·7	301·4	—22·2	57·4	1,594·7

(p) Preliminary.

TABLE 13—THE NATIONAL INCOME (a)—*Continued*

INCOME PAID OUT TO INDIVIDUALS
(millions of dollars)

MANITOBA

—	Salaries and Wages	Invest-ment Income	Individual Enterprisers			Net Dominion Transfer re Pensions and Relief	Municipal Education and Public Welfare	Total
			Agriculture	Other	Total			
	A	B	E	F	C	D	G	H
1926	165·0	32·1	58·6	24·6	83·2	1·1	8·4	289·8
1927	171·5	33·9	51·7	26·4	78·1	1·2	8·6	293·3
1928	187·2	35·0	51·5	27·8	79·3	1·5	8·6	311·6
1929	191·7	35·3	46·4	29·2	75·6	1·7	9·0	313·3
1930	175·7	36·8	21·1	24·4	45·5	2·2	10·1	270·3
1931	150·6	32·9	7·8	21·4	29·2	3·0	9·9	225·6
1932	124·1	24·5	5·6	17·1	22·7	3·1	9·8	184·2
1933	110·4	19·7	11·5	15·3	26·8	3·8	9·4	170·1
1934	114·3	19·8	23·5	15·8	39·3	4·6	10·1	188·1
1935	125·7	20·2	15·2	17·2	32·4	4·1	10·0	192·4
1936	132·4	21·8	28·5	18·4	46·9	5·1	9·6	215·8
1937 (p)	145·5	22·9	56·9	20·1	77·0	3·8	9·7	258·9

SASKATCHEWAN

1926	139·1	20·0	203·8	28·8	232·6	— 1·3	12·1	402·5
1927	145·3	20·7	184·2	30·7	214·9	— 1·2	11·4	391·1
1928	157·4	21·3	228·4	33·5	261·9	— 1·3	13·0	452·3
1929	154·8	21·8	158·1	32·4	190·5	— ·5	13·5	380·1
1930	135·1	22·7	33·9	26·3	60·2	·6	13·2	231·8
1931	107·5	22·0	—8·1*	21·2	13·1	10·4	10·6	163·6
1932	88·8	17·8	—7·4*	17·9	10·5	9·2	9·3	135·6
1933	76·9	14·9	3·5	15·3	18·8	6·0	9·0	125·6
1934	77·7	15·2	20·1	15·3	35·4	18·7	8·8	155·8
1935	85·5	14·8	35·5	17·0	52·5	14·1	9·2	176·1
1936	89·5	14·8	60·2	18·4	78·6	12·7	9·5	205·1
1937 (p)	97·2	15·1	22·7	19·2	41·9	31·7	9·0	194·9

*Net loss.

ALBERTA

1926	134·9	20·6	114·5	22·4	136·9	·3	9·4	302·1
1927	147·1	21·5	115·7	24·4	140·1	·2	10·3	319·2
1928	164·9	22·5	155·9	27·8	183·7	— ·1	10·7	381·7
1929	170·6	23·6	119·1	28·7	147·8	·2	10·9	353·1
1930	153·9	25·0	39·2	24·6	63·8	1·0	10·5	254·2
1931	128·1	24·1	18·7	21·6	40·3	1·0	10·9	204·4
1932	108·7	19·2	16·6	17·9	34·5	1·5	11·0	174·9
1933	95·6	16·2	19·4	15·6	35·0	2·6	9·5	158·9
1934	98·5	15·8	45·7	15·9	61·6	1·4	10·8	188·1
1935	107·6	16·6	48·9	17·4	66·3	6·0	10·7	207·2
1936	110·0	17·0	52·3	18·5	70·8	1·4	10·7	209·9
1937 (p)	117·3	17·5	75·5	20·1	95·6	1·0	11·1	242·5

(p) Preliminary.

TABLE 13—THE NATIONAL INCOME (a)—*Concluded*

INCOME PAID OUT TO INDIVIDUALS
(millions of dollars)

BRITISH COLUMBIA

—	Salaries and Wages	Invest-ment Income	Individual Enterprisers			Net Dominion Transfer re Pensions and Relief	Municipal Education and Public Welfare	Total
			Agriculture	Other	Total			
	A	B	E	F	C	D	G	H
1926	237·2	33·6	12·8	43·4	56·2	2·3	6·6	335·9
1927	246·2	35·3	14·2	45·1	59·3	2·5	6·6	349·9
1928	261·9	36·7	19·7	47·6	67·3	2·9	8·3	377·1
1929	277·6	37·7	20·5	50·0	70·5	2·7	7·2	395·7
1930	249·3	39·8	19·4	44·2	63·6	2·8	8·3	363·8
1931	201·9	37·7	11·3	33·8	45·1	3·9	8·7	297·3
1932	161·2	31·0	8·4	26·4	34·8	6·7	10·2	243·9
1933	147·0	26·1	9·6	24·9	34·5	5·8	9·8	223·2
1934	162·1	25·6	12·0	26·5	38·5	5·0	9·9	241·1
1935	179·1	27·6	11·4	29·8	41·2	6·3	10·0	264·2
1936	200·9	30·1	13·3	31·8	45·1	3·4	9·9	289·4
1937 (p)	225·4	31·4	15·5	35·3	50·8	1·5	10·0	319·1

YUKON (Incomplete)

1926	1·5	.....	.....	.....	·1	.....	.....	.....
1927	1·7	.....	.....	.....	·1	.....	.....	.....
1928	1·8	.....	.....	.....	·1	.....	.....	.....
1929	2·0	.....	.....	.....	·1	.....	.....	.....
1930	1·9	.....	.....	.....	·1	.....	.....	.....
1931	1·8	.....	.....	.....	·1	.....	.....	.....
1932	1·6	.....	.....	.....	·1	.....	.....	.....
1933	1·5	.....	.....	.....	·1	.....	.....	.....
1934	1·6	.....	.....	.....	·1	.....	.....	.....
1935	1·7	.....	.....	.....	·1	.....	.....	.....
1936	2·3	.....	.....	.....	·1	.....	.....	.....
1937 (p)	2·7	.....	.....	.....	·1	.....	.....	.....

Footnotes

(A) Summary of estimates as given in the Study on National Income prepared by Professor D. C. MacGregor, Professor G. E. Britnell, J. R. Rutherford and J. J. Deutsch. For details and explanatory notes see this Study.

(B) Includes bond interest and dividends paid to Canadian individuals, interest on farm mortgages paid to individuals, income from life insurance accruing to individuals, net rentals and net income from non-farm dwellings before allowing for interest on mortgages held by other than life insurance companies. The following, for which satisfactory information was not available, are not included: net rentals received by individuals from rented business property; corporate net income available for dividends but not paid out to shareholders; bond coupons or foreign dividend or interest cheques cashed abroad by Canadian residents; various sources of investment income from abroad other than bond interest and dividends; interest on deposits with banks, trust and loan companies.

(C) Net income of individual enterprisers (non-incorporated) for which it is not possible to distinguish between salaries and wages, interest on capital, profits and rent. Included in this group are farmers, fishermen, proprietors of independent merchandising establishments, lodging house keepers, persons in the professions not on salary but working on their own account, own accounts in construction and miscellaneous.

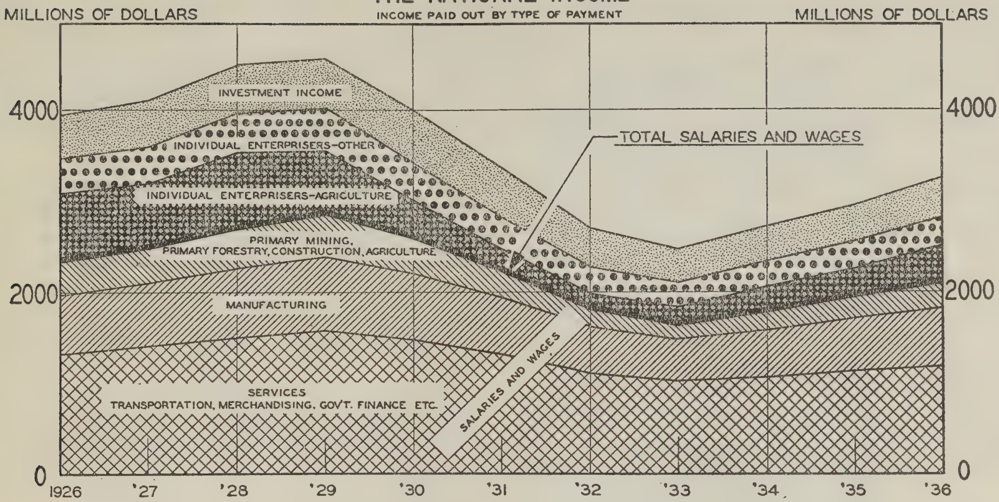
(D) Payments by the Dominion government received by residents of the province in respect of war pensions, old age pensions, direct and agricultural relief, less estimated contribution by residents of the province to the Dominion tax revenue required to meet these expenditures. For the method employed in estimating the contribution by each province to the Dominion tax revenue to meet these expenditures, see the Study on National Income.

(G) Expenditures on Education and Public Welfare from Municipal Revenues. Municipal taxes on real estate were included in Farm Operating Expenses (Tables I-E (3) to X-E (3) in the Study) and deducted from income from housing (Tables I-B to X-B in the Study). The services provided individuals (chiefly education and public welfare) which are paid out of such taxes are part of individuals' incomes and are therefore added into the totals (at cost).

(P) Preliminary.

CHART VI

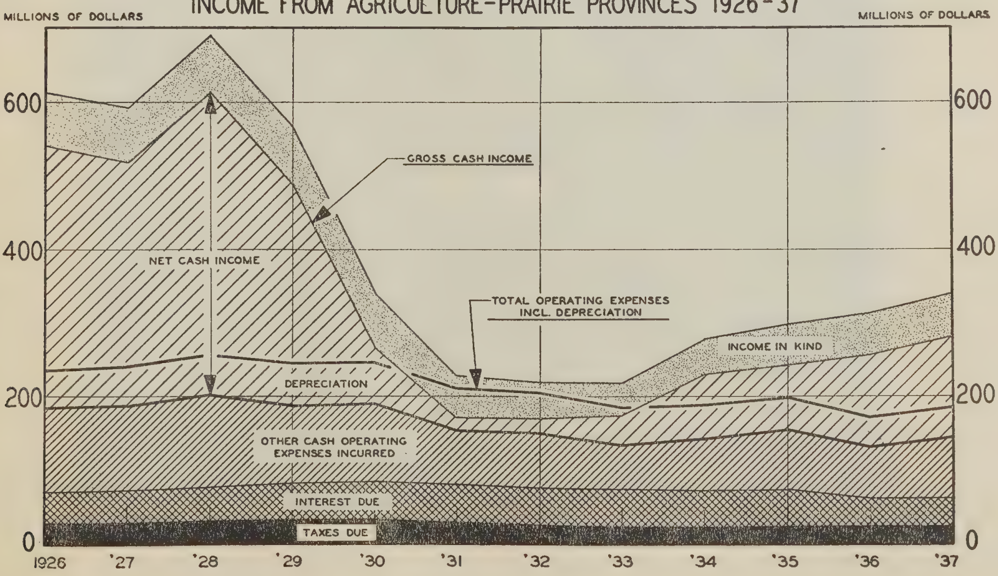
THE NATIONAL INCOME



The combination of falling prices, drought and rigid costs was disastrous to agriculture in the Prairie Provinces. The effects of these factors are illustrated in Chart VII. The areas on the Chart showing expenses represent total expenses incurred (not including living expenses) in the operation of farms whether paid for in cash by the farmer or not. In so far as these expenses could not be paid for in cash they resulted in the accumulation of debt or were met with government assistance. During 1931, 1932 and 1933 there was virtually nothing with which to meet living expenses and the net cash income was not sufficient to meet depreciation of buildings and machinery. Government relief, consumption of capital, and the use of past savings provided the way out. Although more

CHART VII

INCOME FROM AGRICULTURE–PRAIRIE PROVINCES 1926-37

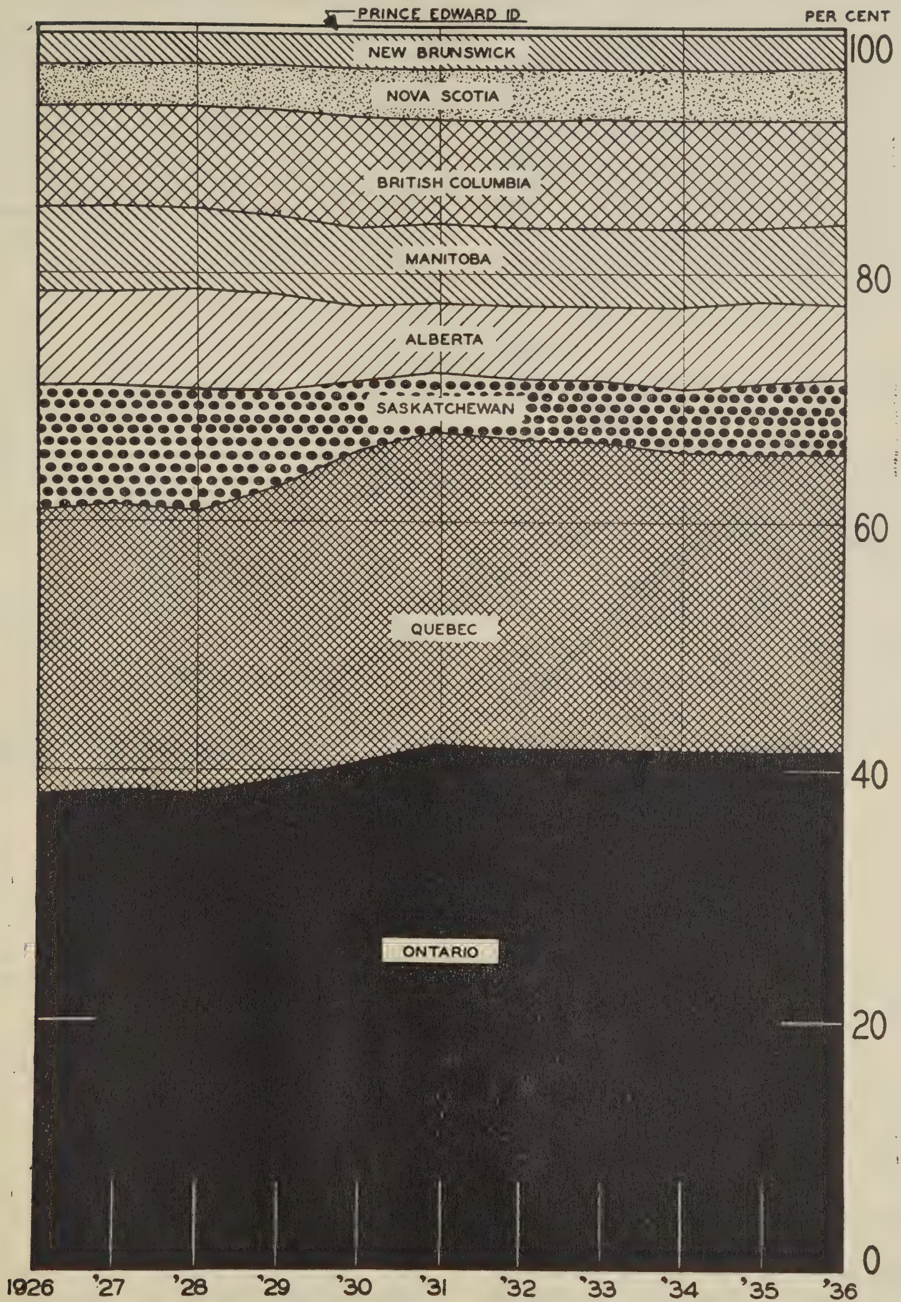


normal weather conditions prevailed elsewhere in Canada falling prices and rigid costs brought sharp contractions in agricultural income. In every province income from agriculture fell further than salaries and wages. In Prince Edward Island and New Brunswick, where potatoes are an important cash crop, net farm income fell by 74 per cent and 51 per cent respectively between 1929 and 1933. For the Dominion as a whole the net income from agriculture declined about 82 per cent between 1928 and 1932. In 1928 it had been 18 per cent of the total income; in 1932 it was only 5 per cent of a greatly reduced income. In this connection, however, it should be noted that farm income from home-grown produce was estimated at farm prices and not at city prices. This undoubtedly places too small a money value on the real income of farmers in relation to the income of urban residents. The same method was employed for all the provinces, and any lack of comparability between their estimated total incomes arises out of the fact that income in kind on farms is relatively more important in some provinces as in Prince Edward Island, than in others. However, for some purposes such as the payment of interest, debts, and taxes it is changes in actual money income that are important.

Provincial incomes varied according to the extent of dependence on exports and agriculture. The percentage distribution of the national income between provinces for the period 1926-36 is shown in Chart VIII. Ontario and Quebec, which received more than 60 per cent of the national income, and where the recently expanding export industries are situated, and where investment income and payroll in service and manufacturing industries are largely concentrated, obtained a larger share of the total after 1930. There were no striking changes in the shares of the Maritimes and British Columbia.

CHART VIII

PERCENTAGE DISTRIBUTION OF THE NATIONAL INCOME

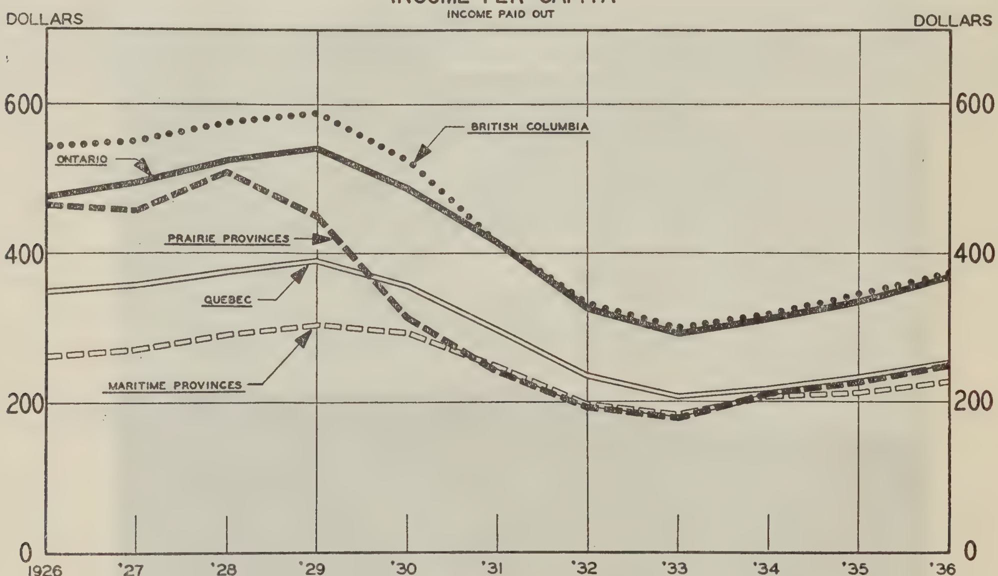


The average per capita money incomes in the chief economic regions during 1926-36 are shown in Chart IX. The chart shows the considerable disparity between the highest and lowest per capita incomes which existed during 1926-29, the narrowing of that disparity after 1930, and the sharp decline which all regions experienced between 1929 and 1933. The results of the differing economic forces which affected the various regions during the post-war period are indicated by the relative magnitude of the per capita incomes prior to 1930. Lower transportation costs resulting from the opening of the Panama Canal, depressed ocean freight rates, and the extensions of the Crow's Nest Pass rates to the Pacific Coast brought British Columbia's rich virgin resources closer to world markets and extended the metropolitan influence of Vancouver. Higher profits resulting from cheaper transportation and improved technique, together with the high rate of investment which ensued raised British Columbia' per capita income to the highest level in Canada.

The relatively high level of the per capita income in the Prairie Provinces during 1926-28 was the result of a most favourable conjuncture of bumper crops and high prices. The prosperous and expanding export regions of the West gave a considerable impetus to the sheltered service industries and the protected manufactures of Ontario and Quebec. This, and the stimulus given by the newly developing export industries in the northern areas, were the main bases of the expansion of income in the central provinces. The persistently unfavourable circumstances in which the Maritimes found themselves and their failure to participate extensively in the Canadian expansion are indicated by the relatively low per capita income of that region. The more immediate factors affecting that condition are the predominance of small scale enterprise in agriculture, fishing, and manufacturing and the relatively unfavourable age-distribution of the population.

CHART IX

INCOME PER CAPITA



During the down-swing of the depression the incomes of the predominantly exporting regions, the Prairie Provinces and British Columbia, declined most sharply. In the recovery of British Columbia's income since 1933, the Ottawa Agreements played a large part. The income of the Maritime Provinces during the cycle was considerably more stable than that of the other regions. This was due at least in part to the effects of the Maritime Freight Rates Act, the subventions on coal and coke, higher tariffs on iron and steel, and Empire preferences on apples and lumber. Since 1934 the heavy capital expenditures of the provincial governments on highways must have given a considerable stimulus to their economies.

Percentage variations in income by provinces are shown in Table 14:—

TABLE 14

Per Capita Money Incomes as Percentages of the 1928 or 1929 Peaks

—	1933	1936
Nova Scotia.....................(1929)	63·1	79·3
New Brunswick..................(1929)	60·0	73·0
Ontario..........................(1929)	55·7	69·1
Quebec..........................(1929)	55·3	66·6
Prince Edward Island.............(1929)	55·0	67·8
Canada..........................(1928)	52·3	65·9
British Columbia.................(1929)	52·2	64·3
Manitoba........................(1929)	51·8	65·7
Alberta..........................(1928)	37·6	46·9
Saskatchewan....................(1928)	25·7	41·9

Fluctuations in real incomes per capita have not been as great as in money incomes. However, such offsetting gains accrue more slowly than would appear from Table 15 since many expenditures are the result of past commitments and are not immediately affected by current prices. It should also be remembered that for costs of government and debt charges, money income, and not real income, is the significant quantity.

TABLE 15

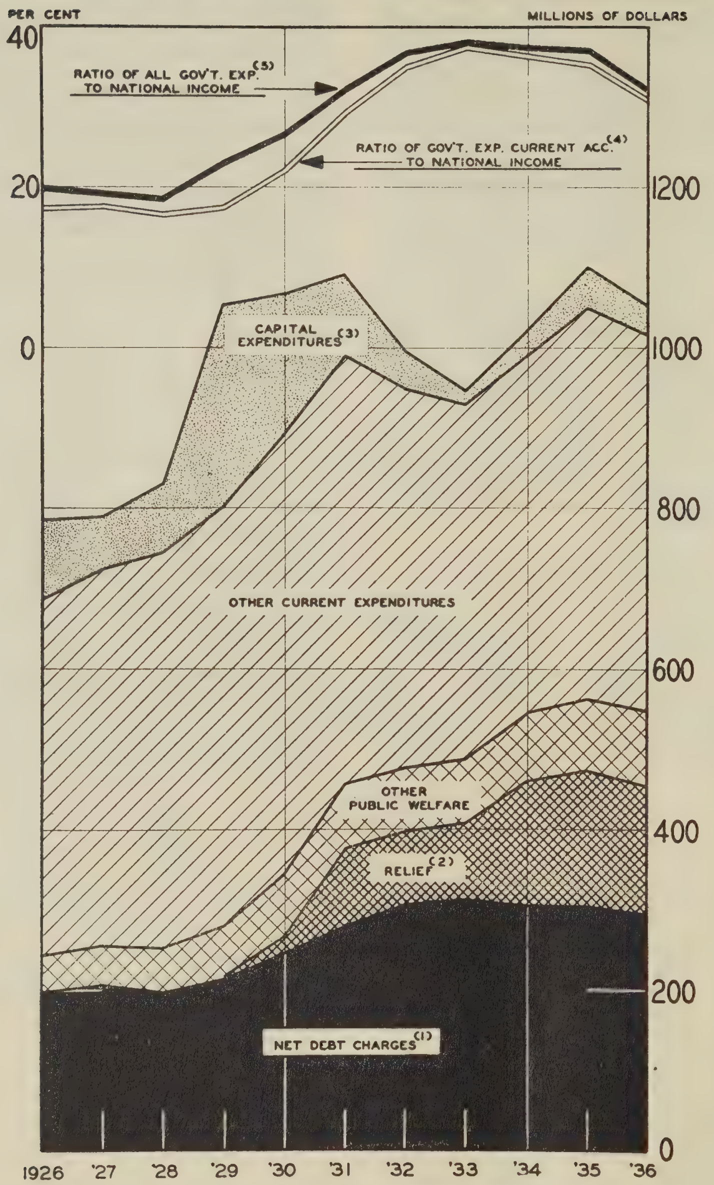
Real Income per Capita, (a) Canada, 1926-36

—	$	Index	—	$	Index
1926.........	432	100	1934.......	338	78
1929.........	471	109	1935.......	360	83
1933.........	318	74	1936.......	384	89

(a) Per Capita money income corrected by the Dominion Bureau of Statistics cost of living index.

For convenience, a series of charts has been included showing the relation between total income and government expenditures for the Dominion as a whole and each of the provinces. Since a detailed analysis of public finance in Canada has been made in other studies prepared for the Commission, it is sufficient here to point out only a few relations. The changes in total government expenditures during 1926-36 which are shown in Chart X indicate the manner in which public finance influenced, or was affected by, the economic changes of the period. The rapid increase in the capital expenditures during 1928-29 contributed to the boom and the curtailment in 1932 and 1933 intensified the decline. The relative importance of the increased burdens arising directly out of the depression are shown by the increased expenditures on relief and debt charges. The differing extent to which these burdens bore upon the governments of the various provinces and the conditions which gave rise to the large inter-governmental and inter-regional transfers of income which characterized the depression, are indicated in Charts XI to XX.

CHART X
GOVERNMENT EXPENDITURES
TOTAL OF DOMINION, PROVINCES AND MUNICIPALITIES 1926-36

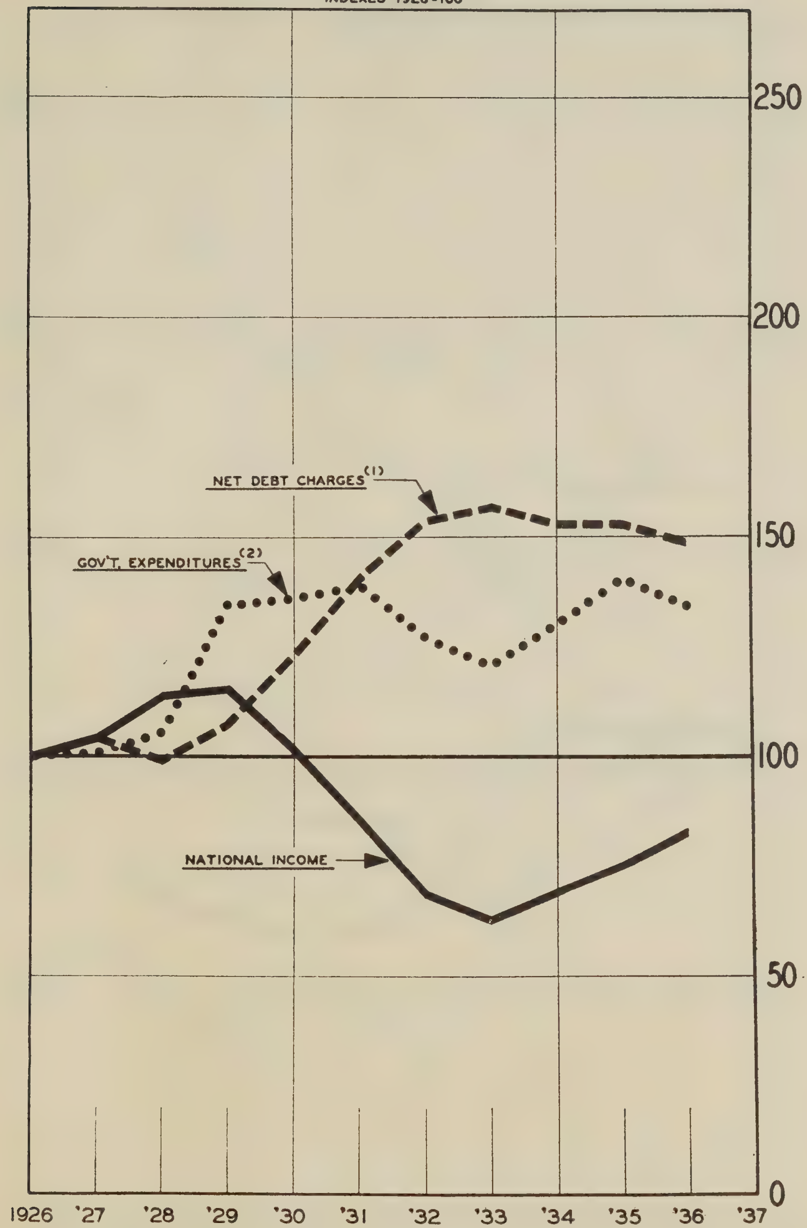


(1) Interest paid including the C.N.R. less interest received from advances, investments and sinking funds. Excludes sinking fund contributions and debt retirement.
(2) Total cost, including amounts capitalized, of direct relief, agricultural aid and relief works.
(3) Capitalized expenditures of the Dominion, C.N.R. and the provinces on all non-self-supporting assets including highways and public buildings.
(4) Expenditures on current account plus capitalized relief, of Dominion, provinces and municipalities.
(5) Includes capitalized expenditures of the Dominion, C.N.R. and the provinces on all non-self-supporting assets including highways and public buildings.

CHART XI

CANADA

NATIONAL INCOME, GOVERNMENT EXPENDITURES AND DEBT CHARGES 1926-36
INDEXES 1926=100

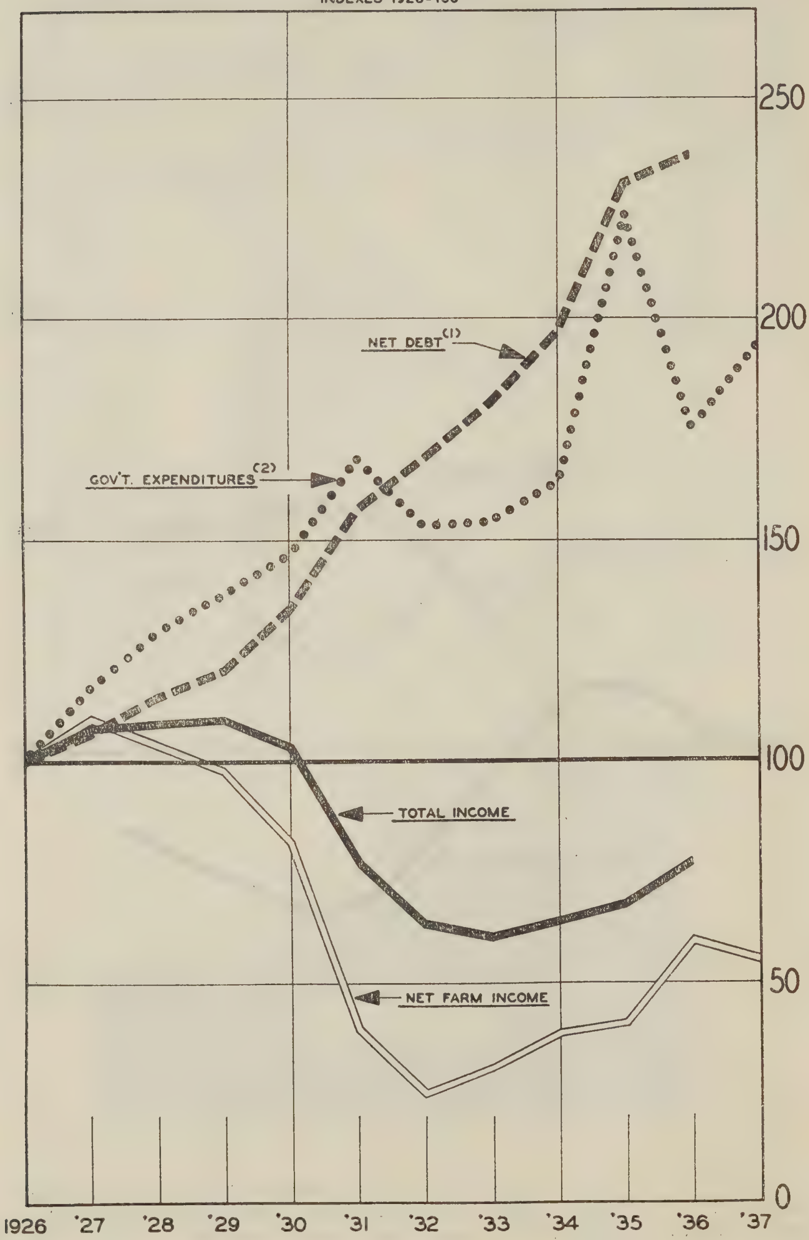


(1) Interest paid including the C.N.R. less interest received from advances, investments and sinking funds. Excludes sinking fund contributions and debt retirement.
(2) Current account expenditures of the Dominion, provinces and municipalities, plus capitalized expenditures of the Dominion, C.N.R. and provinces on all non-self-supporting assets including highways and public buildings.

CHART XII

PRINCE EDWARD ISLAND

TOTAL INCOME, NET FARM INCOME, GOVERNMENT EXPENDITURES AND DEBT 1926–37
INDEXES 1926=100

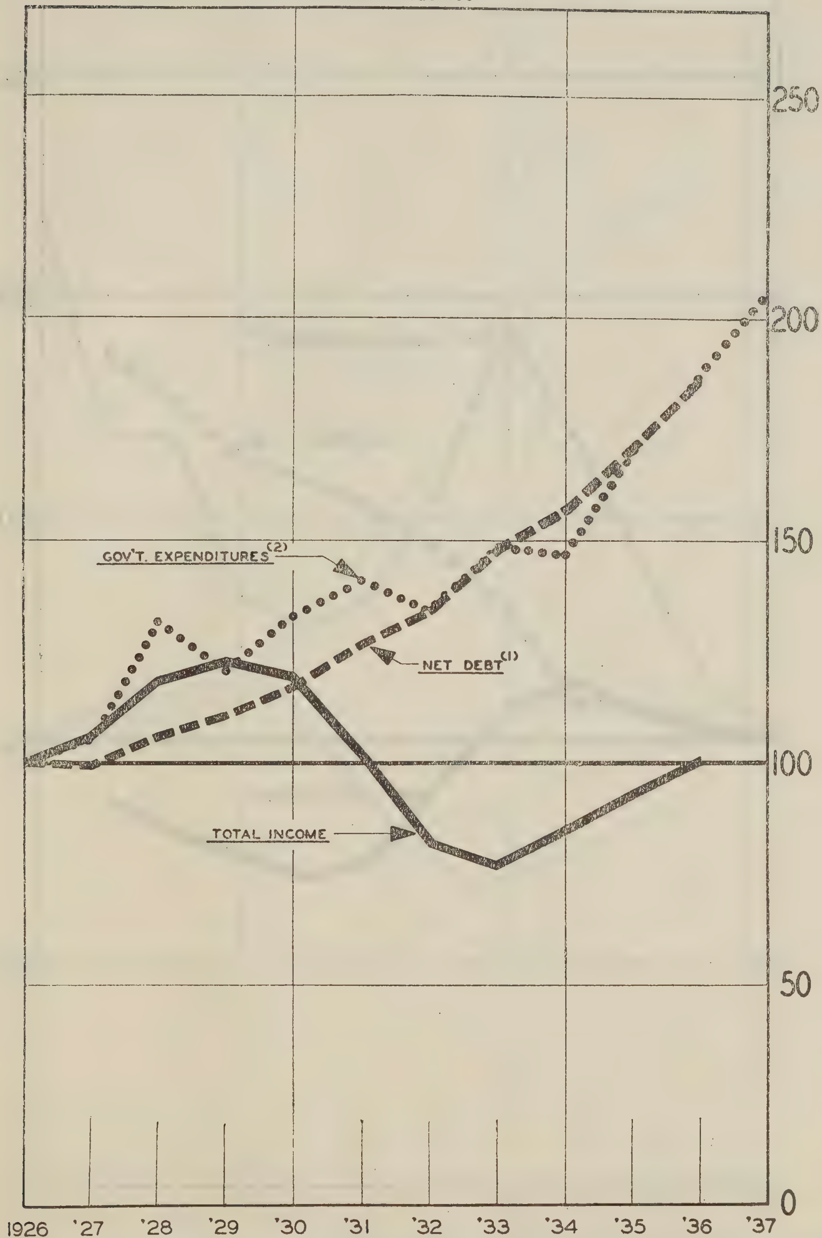


(1) Non-self-supporting provincial and municipal debt. 1936 preliminary.
(2) Includes municipal current expenditures plus capitalized direct relief, provincial current expenditures plus capitalized relief and all capitalized provincial expenditures on non-self-supporting assets, including highways and public buildings.

CHART XIII

NOVA SCOTIA

TOTAL INCOME, GOVERNMENT EXPENDITURES AND DEBT 1926-37
INDEXES 1926=100

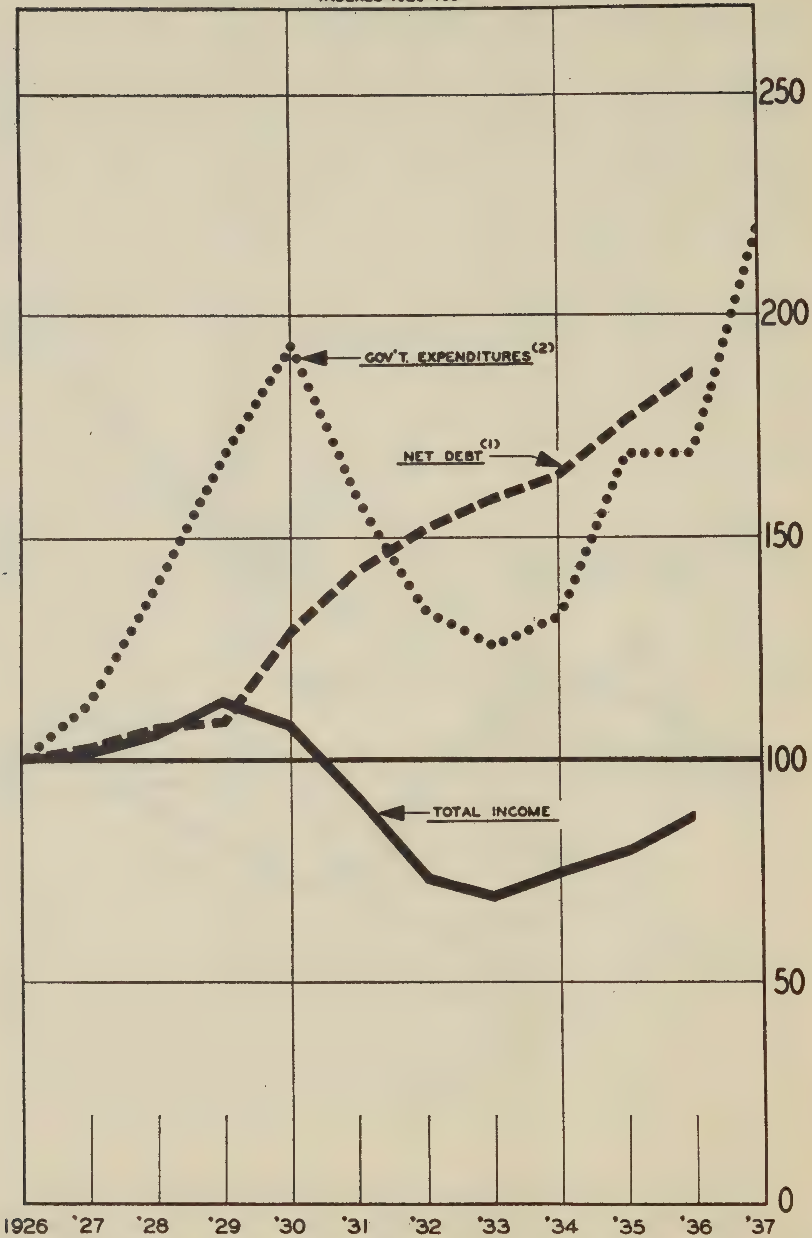


(1) Non-self-supporting provincial and municipal debt. 1936 preliminary.
(2) Includes municipal current expenditures plus capitalized direct relief, provincial current expenditures plus capitalized relief and all capitalized provincial expenditures on non-self-supporting assets, including highways and public buildings.

CHART XIV

NEW BRUNSWICK

TOTAL INCOME, GOVERNMENT EXPENDITURES AND DEBT 1926-37
INDEXES 1926=100



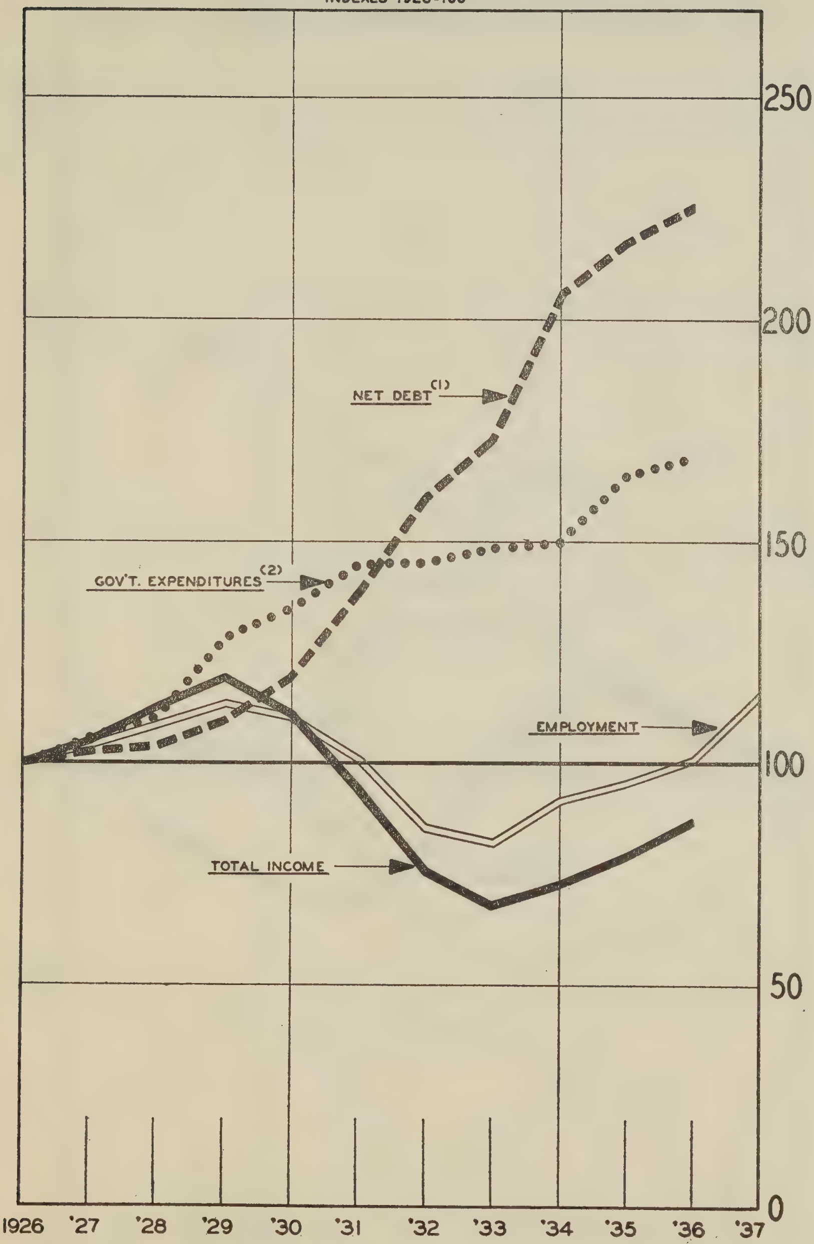
(1) Non-self-supporting provincial and municipal debt. 1936 preliminary.
(2) Includes municipal current expenditures plus capitalized direct relief, provincial current expenditures plus capitalized relief and all capitalized provincial expenditures on non-self-supporting assets, including highways and public buildings.

CHART XV

QUEBEC

TOTAL INCOME, EMPLOYMENT, GOVERNMENT EXPENDITURES AND DEBT 1926-37

INDEXES 1926=100

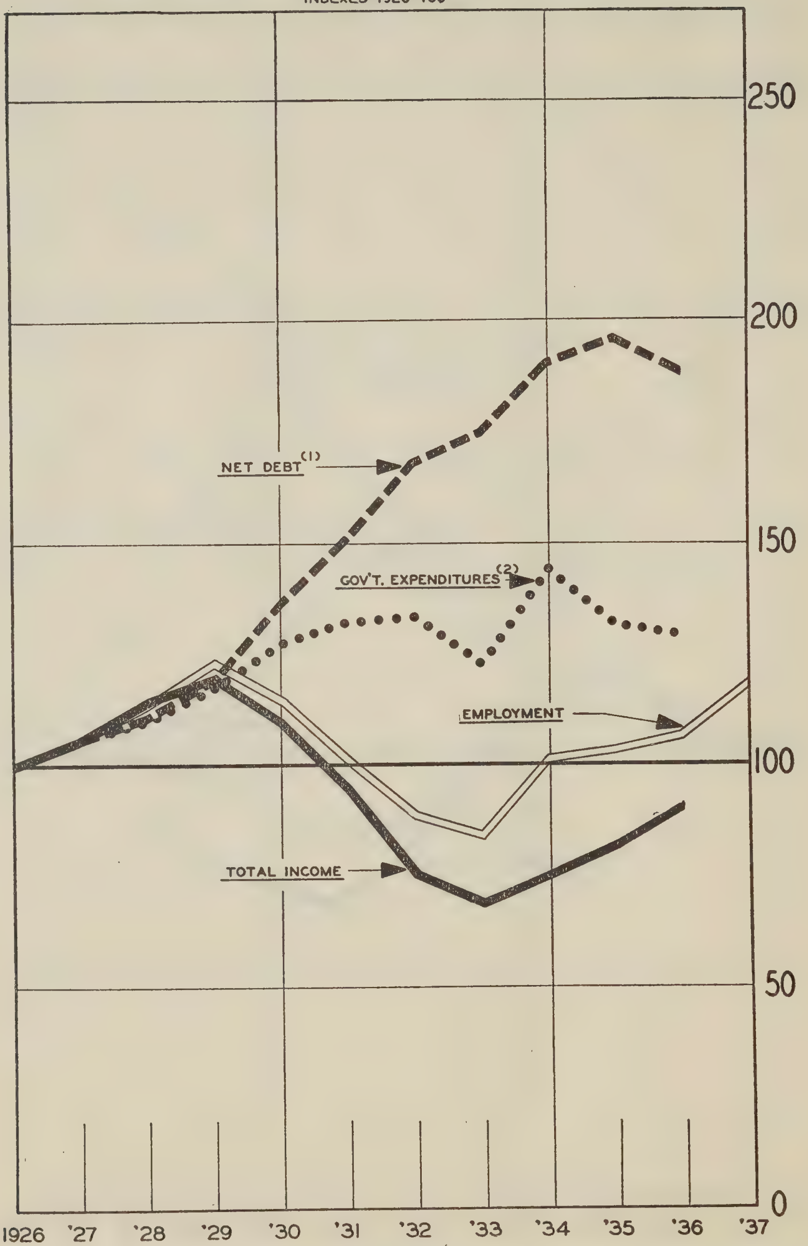


(1) Non-self-supporting provincial and municipal debt. 1936 preliminary.
(2) Includes municipal current expenditures plus capitalized direct relief, provincial current expenditures plus capitalized relief and all capitalized provincial expenditures on non-self-supporting assets, including highways and public buildings.

CHART XVI

ONTARIO

TOTAL INCOME, EMPLOYMENT, GOVERNMENT EXPENDITURES AND DEBT 1926-37
INDEXES 1926=100

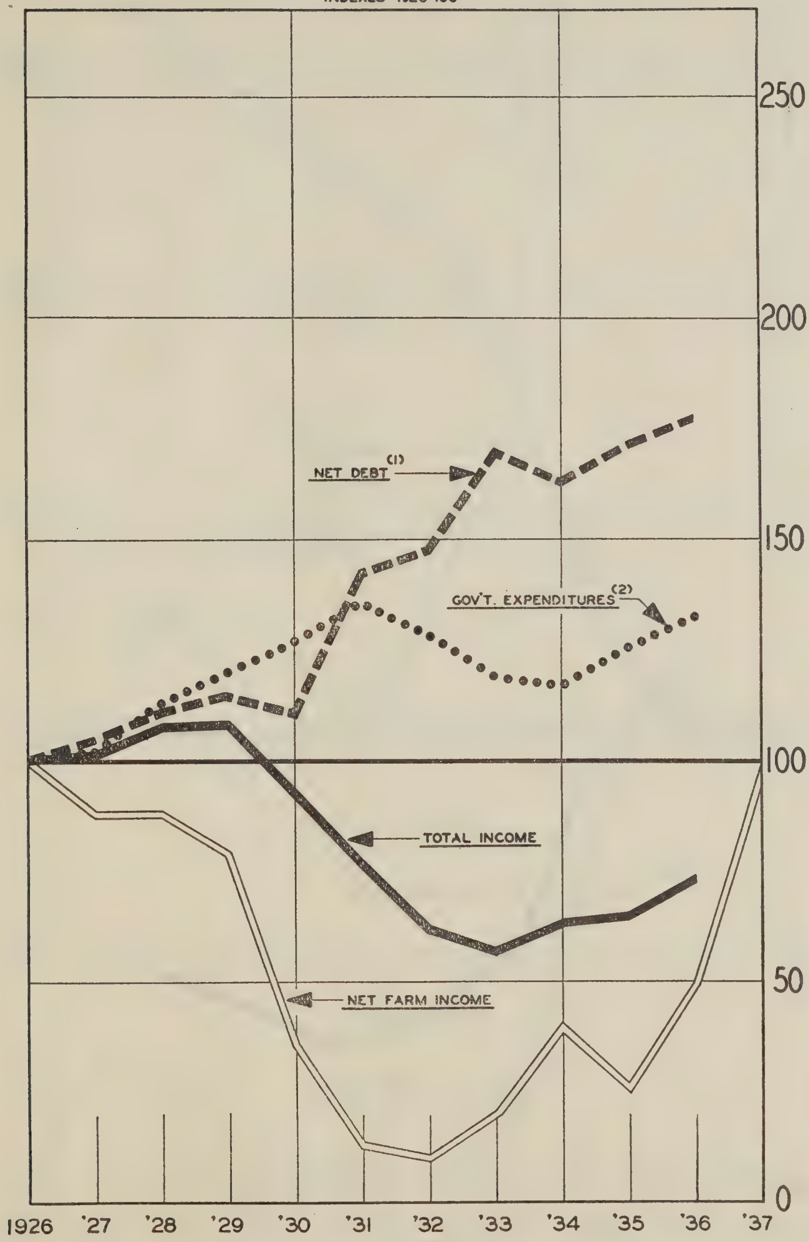


(1) Non-self-supporting provincial and municipal debt. 1936 preliminary.
(2) Includes municipal current expenditures plus capitalized direct relief, provincial current expenditures plus capitalized relief and all capitalized provincial expenditures on non-self-supporting assets, including highways and public buildings.

CHART XVII

MANITOBA

TOTAL INCOME, NET FARM INCOME, GOVERNMENT EXPENDITURES AND DEBT 1926-37
INDEXES 1926=100

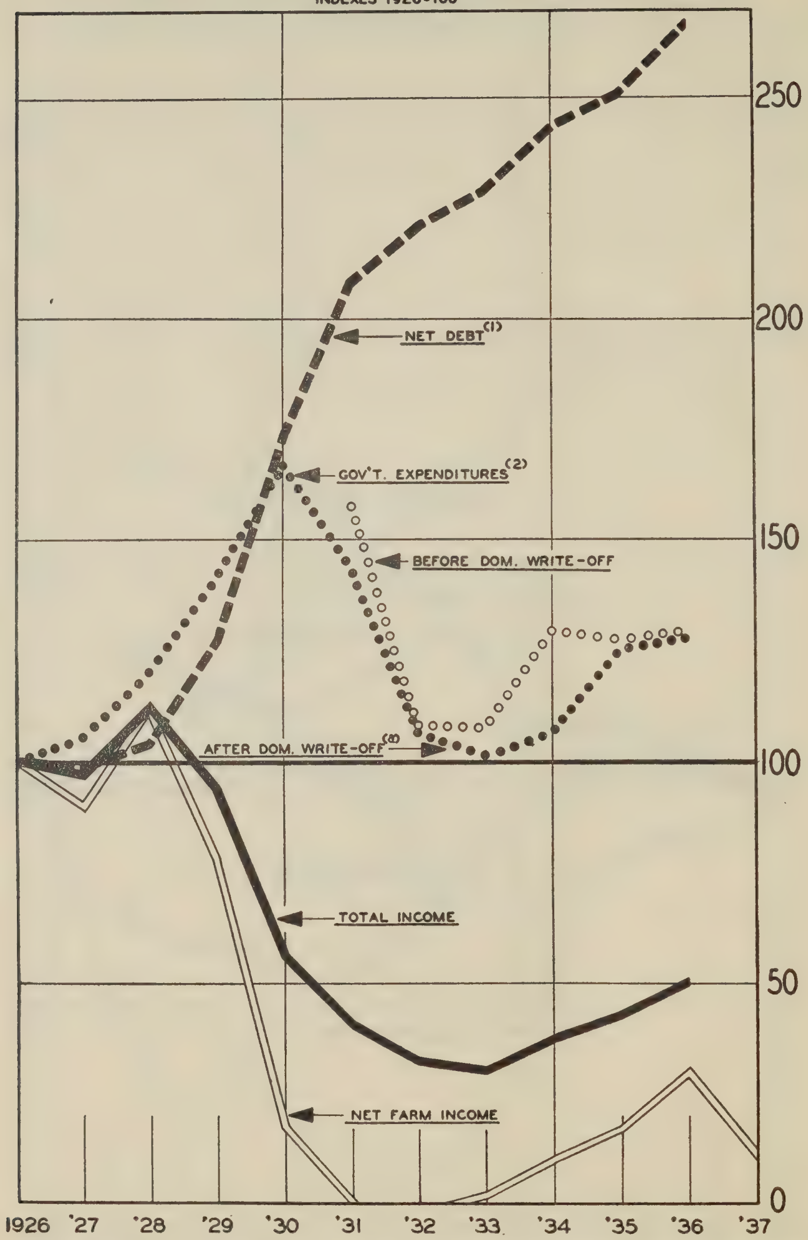


(1) Non-self-supporting provincial and municipal debt. 1936 preliminary.
(2) Includes municipal current expenditures plus capitalized direct relief, provincial current expenditures plus capitalized relief and all capitalized provincial expenditures on non-self-supporting assets, including highways and public buildings.

CHART XVIII

SASKATCHEWAN

TOTAL INCOME, NET FARM INCOME, GOVERNMENT EXPENDITURES AND DEBT 1926-37
INDEXES 1926=100

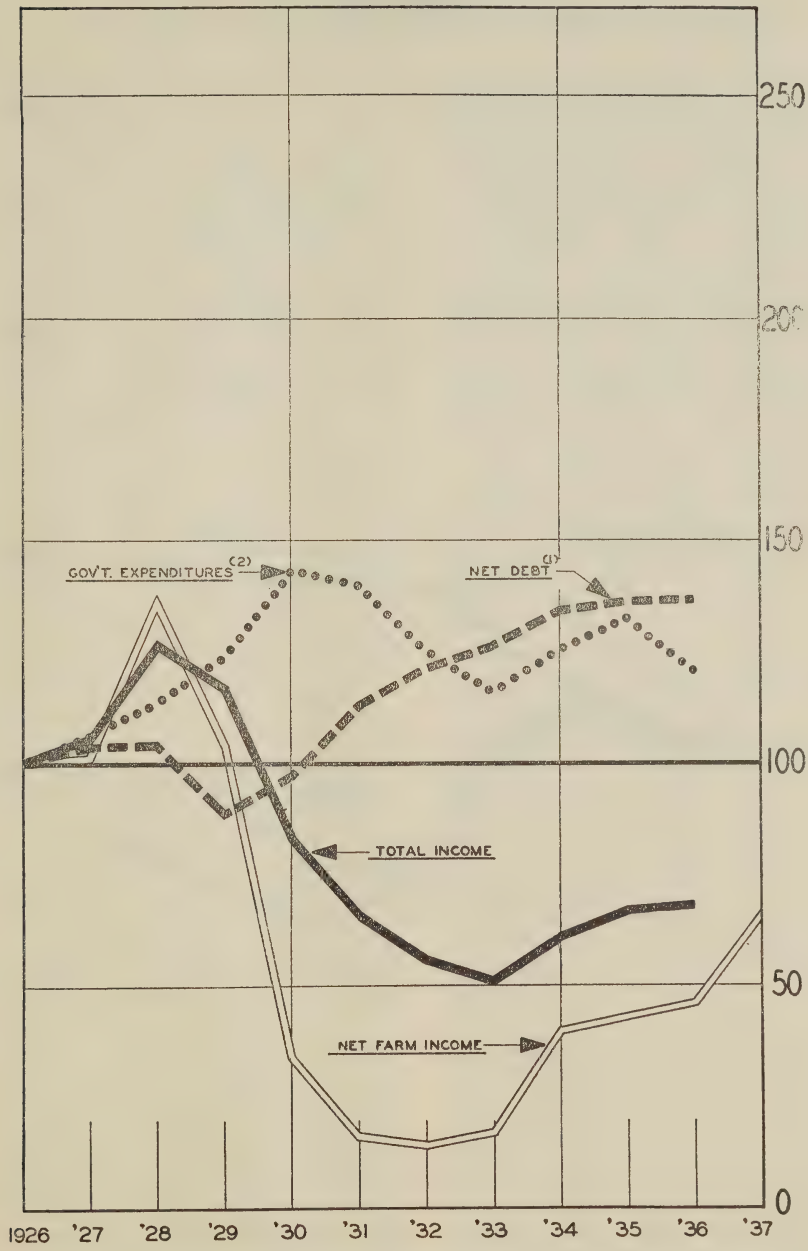


(1) Non-supporting provincial and municipal debt. Provincial debt adjusted retroactively for the proposed Dominion write-off of relief loans amounting to $17,682,000.
(2) Includes municipal current expenditures plus capitalized direct relief, provincial current expenditures plus capitalized relief and all capitalized provincial expenditures on non-self-supporting assets including highways and public buildings. (*a*) after retroactive adjustment for the proposed Dominion write-off of relief loans amounting to $17,682,000.

CHART XIX

ALBERTA

TOTAL INCOME, NET FARM INCOME, GOVERNMENT EXPENDITURES AND DEBT 1926-37
INDEXES 1926=100

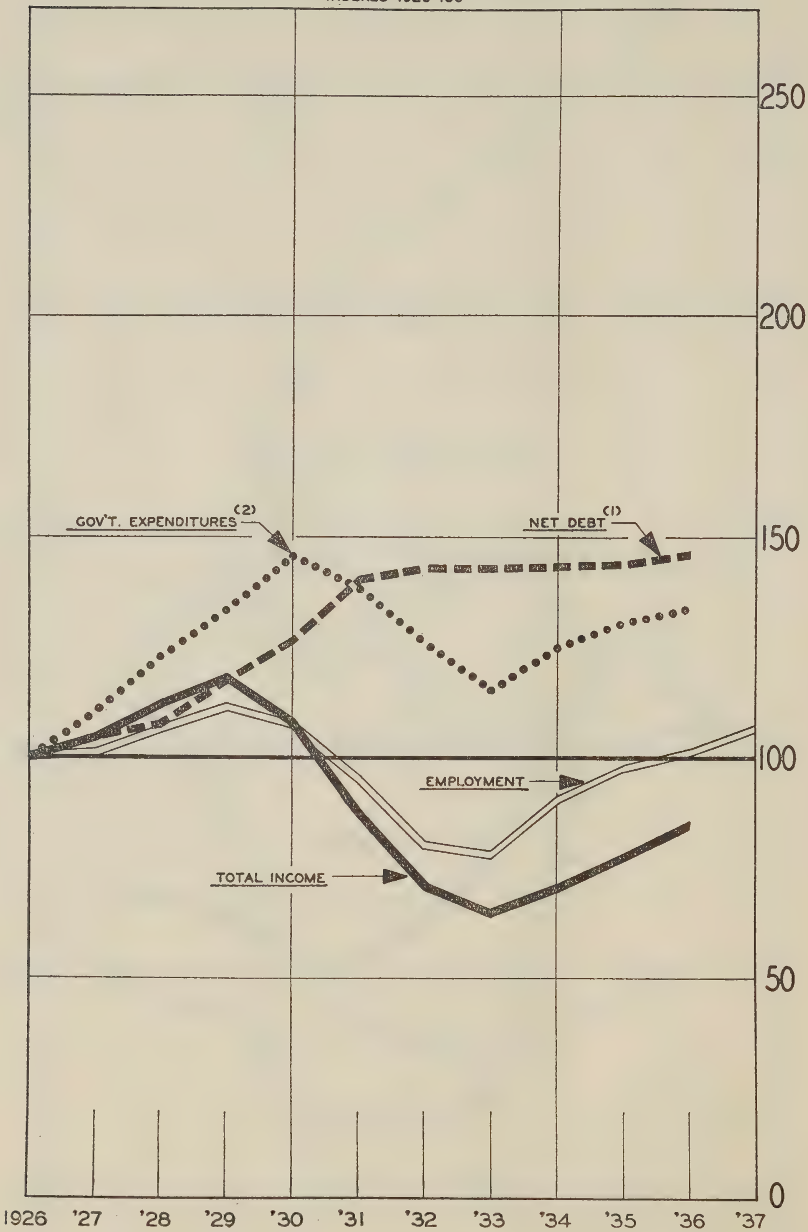


(1) Non-self-supporting provincial and municipal debt. 1936 preliminary.
(2) Includes municipal current expenditures plus capitalized direct relief, provincial current expenditures plus capitalized relief and all capitalized provincial expenditures on non-self-supporting assets, including highways and public buildings.

CHART XX

BRITISH COLUMBIA

TOTAL INCOME, EMPLOYMENT, GOVERNMENT EXPENDITURES AND DEBT 1926-37
INDEXES 1926=100



(1) Non-self-supporting provincial and municipal debt. 1936 preliminary.
(2) Includes municipal current expenditures plus capitalized direct relief, provincial current expenditures plus capitalized relief and all capitalized provincial expenditures on non-self-supporting assets, including highways and public buildings.

Chapter VII

REGIONAL EFFECTS OF DOMINION POLICIES

A. Tariff Policy

1. *Review of Tariff Policy*

It is not the purpose of this analysis to assess the results for the Dominion as a whole, of Canadian tariff policy nor to judge of its wisdom. The purpose is to distinguish differential effects on the various regions, particularly those relevant to government finance, and to point out certain confusions of thought which have given rise to erroneous conclusions.

The very limited accounts of tariff policy in each period reviewed have been designed, not as a record of tariff changes, but rather to reveal a few highly pertinent facts.

In the first place, tariff policy in Canada has been closely interwoven with other national policies. It has been in its main outlines, though not always in its details, a definite part of an attempt through national policy to integrate and unify the Dominion economically. Western settlement, all-Canadian transportation, and industrialization by the protective tariff made up a three-fold policy of which the determining lines were set before 1890.

In the second place, it is important to emphasize that the place of the tariff in national policy had been broadly determined and, by accepted political processes, agreed upon before the great period of expansion began. The growth of Canada from a population of less than 4,500,000 took place under the protective system and, as the growth proceeded, the development of the country was continuously adjusted to the tariff as it was to the structure of railway rates, the distribution of natural resources, and other relevant conditions. The protective tariff did not cause the expansion but with other factors it gave direction to it.

In the third place, it has been emphasized that from the middle nineties to 1929 there had been a long period of economic expansion broken only by downward fluctuations in 1914 and 1920; in each case, by fortunate sets of circumstances, readjustment followed quickly but the difficulties encountered were a warning of the future. As will be explained later (Section 2), the tariff imposes limitations on export industries and export regions; the limitations, ultimately, and in the main, affect incomes derived from the ownership of resources used in the production of export commodities rather than on other incomes in the export region. As long as the export industries were expanding, as long as "export-property" incomes and values were rising, the limitations imposed by the tariff were borne with little inconvenience and no great complaint. Indeed in the most active period of expansion much of the limitations was offset by Dominion expenditures and capital imports which financed the capital-goods requirements and increased the incomes of the expanding regions. Through the medium of the tariff as a source of revenue these rising "export" incomes contributed to the carrying of the general developmental "overhead" of the country. When, however, expansion gave way to contraction in the export regions, when incomes from resources were no longer rising but falling, demands for relief for the export regions through tariff reductions increased in number and insistence.

The above statements apply particularly to the development of the Prairie Provinces and to a less degree to British Columbia. The case of the Maritime Provinces is in marked contrast. The protective system was established after a considerable development had taken place in the Maritime Provinces and at a time when their export industries were already in decline. In the great period of expansion this region shared less than others despite the growth of the coal and steel industries. Though the persistence of emigration through the period is not to be imputed by any means entirely to the tariff, nevertheless the tariff was a significant influence in that direction.

Fourthly, it is of importance for the problems under discussion that the Canadian tariff from 1879 to 1930 was comparatively stable. There was no pronounced upward movement and, though difficult to measure, there was probably some downward trend. In 1927 an attempt was made by the Economic and Financial Section of the League of Nations to measure relative "tariff levels" in 20 countries. While not altogether satisfactory the results tend to confirm the above generalization.

Only four (including Canada) of the 20 countries had reduced the levels of tariffs on manufactured goods within the period. The British Committee on Industry and Trade in its Report of June, 1925, entitled "Survey of Overseas Markets" (p. 545), concluded that Canadian duties against British exports had fallen between 1914 and 1924, the respective rates being 15¼ and 13¾ per cent.

TABLE 16

Tariff Level Indices—Canada[26]

	1913	1925
All commodities..	18	16
Manufactured articles..	26	23

A considerable part of such reduction between the pre-war and post-war period had occurred automatically because specific duties on such commodities as sugar, bituminous coal, primary iron and steel products, and spirits had remained constant while prices had risen greatly. There had been, however, as mentioned in earlier sections, a number of reductions whose total effect it is difficult or impossible to estimate. The tendency had been to attempt to combine reductions in duties with the least possible sacrifice of protection, or in some cases with increases in protection. Characteristic Canadian devices for accomplishing this were: special concessions of low duties, free import, or drawbacks to manufacturers on products "when imported by manufacturers of ———— for use exclusively in the manufacture of ———— in their own factories"; the sacrifice of duties on materials and parts "of a class or kind not made in Canada" (essentially revenue items); reduction of preferential and treaty rates on non-competitive items, the effect being to shift the source of imports, which did not compete seriously with Canadian production, from a country whose products paid a high rate of duty to one whose products incurred a lower rate; and by reduced preferential rates which, as in the case of raw sugar from the British West Indies, raised the preferential producer's price rather than lowered the Canadian importer's duty-paid price. By such devices the *level* of duties was lowered at the expense of the Dominion Treasury rather than at the expense of the protected industries. Increases in protection achieved by these methods had likewise not been at the expense of the export industries but at that of the Dominion Treasury.

[26] *Tariff Level Indices*, Economic and Financial Section, League of Nations, 1927, p. 15. These figures do not differ significantly from the average *ad valorem* rates of duty collected on *total* imports and on *dutiable* imports.

There had been in addition some reductions in protection to certain industries of which the most important single instances were the automobile and agricultural implement industries.

Whatever the magnitude or method of these reductions, it is reasonably clear that there had not been during the great period of settlement and expansion any important general increase in the tariff. Such net change, as there had been, was probably downward. It improved rather than worsened the position in which the export industries and regions had grown up. An exception to these statements must be made as already noted in the case of the Maritime Provinces, which had enjoyed a considerable economic expansion before they entered Confederation and before the establishment of the protective system, 1879-1887.

2. *The Economic Nature of Tariff Effects and "Burdens"*

Though there is room for some disagreement on particular effects of tariff protection, there is general agreement among economists on the broad economic effects. It is agreed that so-called infant industries, i.e., industries not permanently but only initially handicapped in competition with foreign producers, may, by temporary protection, be established on an economical basis ultimately increasing the national income. The principle is easier to understand, however, than to translate into effective practice. It is generally agreed that, except in this infant-industry case, the long-run effect of tariff protection is to reduce the national real income per head of population. This reduction of income per head is occasioned because the protective tariff promotes a different and presumably less effective distribution of labour and capital than would exist without the tariff. If the country concerned is economically immature and its most effective industries are of the exploitation type in which the ratio of population to resources is low, the diversion of labour and capital occasioned by the protective tariff will be to industries employing more labour relative to resources. If this diversion can be achieved with moderate protection, the result is likely to be that, though the numbers engaged in the export exploitation industries will be reduced, the total population will be increased while the national real income per head will be reduced. To the degree that there are broad economies, industrial, social, and governmental in a larger population, aggregate real income may be increased. Other results, mainly of a non-

economic character, such as diversification of occupations and the "acquisition" of particular industries, which may be deemed by the electorate to be advantageous, may also be achieved. The economic cost of such achievements is the reduced real income per head.

This explanation is given to make clear that the long-run result of a protectionist policy (if it is effective) is a different distribution of capital and population and a different selection of industries. This is accomplished by a restriction of export industries, through raising their costs, and an expansion of industries selected for protection by sheltering their selling prices from the lower cost imports. If the policy is continuous during a period of general expansion, the rate of growth of the export trades is merely retarded somewhat and that of the protected trades is accelerated somewhat. This relative curtailment of the export industries does not mean that incomes of those working in the export industries are, in the long run, reduced except in so far as the uneconomic character of the tariff reduces real incomes for all. It follows that the incomes of those engaged in the protected industries are not higher than their incomes would have been in the export industries in which they would have been engaged if there were no protection. Over a considerable period, if capital and labour are mobile (and they had a high degree of mobility during the years of expansion in Canada), they will be distributed in such a way that their earnings, whether in the export or protected trades, tend to a rough equality.

The incomes which, in the long run, will be differentially affected by a protectionist policy are those derived from the ownership of immobile and specialized resources. Incomes of farm-land owners as such, whose lands have their most effective use in export production, will be lower, in comparison with the general level of incomes, under a protective policy in such an economy than they would be under a free trade policy. Conversely, probably incomes of owners of urban real estate in areas in which protected industry tends to concentrate will be higher, relative to other incomes, under protection than under free trade. It is only in this limited sense that protection, *in the long run,* takes income from one region and gives it to another or that one region *gains* and another *loses* by a protectionist policy. With this exception, it is not by continuous protection that one region loses and another gains, but by a *change* in the level of protection. The exception has been, however, particularly applicable to the prairie region. Incomes from agricultural property and farm-land values are of great importance there. They have been unquestionably lower than they would have been under free trade if we assume other conditions, such as railway rates, and the direction of investment induced by Dominion developmental expenditures to have been unaffected. They had not, however, been *reduced* up to 1930 by the tariff. The tariff had been in existence throughout the entire period. The lands had been homesteaded, sold, and bought under fairly constant tariff conditions. Those conditions had been discounted in the prices of land from the outset; not with complete accuracy, of course, but presumably with the degree of approximation with which other economic conditions had been evaluated. To some degree it is probable that, in ignorance and optimism, resources were over-valued because full account was not taken of the effect of the tariff and that subsequent experience of the cost of living and of production would bring a downward revision of values and property incomes. It appears indubitable, however, that up to 1929 when the period of Dominon development of western resources ended, any such tendency was more than offset by the railways and other developmental expenditures of the Dominion whose influence was all in the direction of enhancing the value of western resources. As long as the tariff was not increased substantially, its existence could not be said to result in a regional loss any more than the region could be said to undergo a loss because Crow's Nest Pass Agreement rail rates on wheat were not lower than they actually were. It is true, of course, and important in both cases that a downward revision, other things remaining the same, would have given an increase in income to the prairie region.

It is, therefore, of determining importance to emphasize in any discussion of the regional effects of protection in Canada that, over the great periods of expansion from at least 1887 to 1930, there was little change in the general level of the tariff (except for the war-time additions of 7½ and 5 per cent) and that such changes as were made were probably on balance downward.

In summary, it is important to point out certain aspects of this discussion as being particularly relevant to the problems under consideration. (1) The protective tariff policy has imposed a "burden" on the export regions of the country in that the aggregate real incomes of populations of

the regions have been less than they would have been in the absence of the protective tariff. It follows that removal or general downward revision of the tariff would have increased the aggregate real incomes of these regions and would have made possible increases in provincial revenues. (2) In a historical sense, however, it is the conclusion of the above analysis that in the case of the Prairie Provinces and, to a somewhat less degree, of British Columbia, there had, up to about 1929, been no important reduction in relative income, in the sense of actual loss of income hitherto enjoyed. The governments of these provinces were not deprived of taxable income hitherto existent and hence their financial difficulties up to about 1929 are not to be explained by the protective tariff. This is quite consistent with the associated conclusion that general tariff reductions during the period would have improved the income positions of these regions and eased the financial positions of these provincial governments. (3) In contrast, the protective tariff had been a significant, but not the most important, influence in the worsening (about 1880-1900) of the relative income positions of the Maritime Provinces.

Attention above has been directed mainly to the long-run regional effects of tariff protection. In a later section (Section 5) the regional impacts of tariff *changes* will be considered in greater detail.

3. *Calculations of Tariff "Burdens"*

Latterly a great deal of ingenuity and effort has been expended on statistical calculations of tariff "levels" or "burdens" or "costs." Except in a very restricted sense, these attempts have been erroneous in principle and could not escape being faulty in execution. This is true in especial degree of calculations of so-called *regional* tariff "burdens" or "costs."

Such calculations have differed in object and in technique. Most of them suffer from inadequate delimitation of what is to be measured. European calculations have been concerned with tariff "levels" as obstacles to international trade and not with tariff "costs" or regional effects.[27] Because of the predominance of specific duties in European tariffs, the conversion of specific duties into *ad valorem* rates has been the major problem. Useful for their own purpose, these calculations have little relevance to the matters under consideration here.

Calculations of the "cost" of Australian protection, published in 1929, have attracted world-wide attention.[28] In this study, average *ad valorem* duties were calculated for individual groups of products and arbitrary assumptions, based on the quantitative ratio of imports to home production, were made as to the degree to which prices at home were raised to the full extent of the tariff. It was concluded that prices generally were increased about 10 per cent and that the gross income of export industries was reduced by about 8 per cent by the costs of protection (p. 69). In an appendix, and more tentatively, the report allocated to the various states the total "subsidies to protected production" afforded by the tariff and other protectionist policies, reaching the conclusion that the "subsidies" per head of population were twice as great in Victoria and Queensland as in Western Australia, South Australia, and Tasmania.

A much-discussed Canadian calculation was submitted by counsel for the government of Nova Scotia to the Jones Commission in 1934.[29] On the assumption that prices of protected products were raised by the average percentage which duties collected bore to the value of dutiable imports, gains and losses per capita were distributed among the nine provinces of Canada, Ontario and Quebec being the only ones credited with a net gain. The calculation was presented not as an exact one but as "chiefly valuable as an indication of a condition."

Aside from the unanswered question as to what it has been attempted to measure, calculations such as these could only be accurate and reliable if the customs tariff contained no prohibitive duties, if commodities or classes of commodities were completely homogeneous over both imports and production, if there was accurate knowledge of the extent to which prices were enhanced by protection, and if consequently no arbitrary assumptions had to be made. In a country such as Canada, in which standards of consumption differ regionally, in which available external sources of supply also differ regionally, and in which nearness to so large a country as the United States increases greatly the range and variety of products entering into consumption, the pit-falls in such calculations cannot be avoided by even the most ingenious statistician.

A technique of greater statistical validity is that of comparing prices for individual products in the protected country and in the cheapest outside

[27] *Tariff Level Indices,* Economic and Financial Section, League of Nations, 1927. H. Liepmann, *Tariff Levels and the Economic Unity of Europe* (London, 1938).

[28] *The Australian Tariff: An Economic Enquiry,* Melbourne, 1929.

[29] *A Submission on Dominion-Provincial Relations and the Fiscal Disabilities of Nova Scotia within the Canadian Federation,* (Halifax: King's Printer, 1934).

sources of supply. The formal accuracy of the method depends on the products, including the services sold with them, being entirely uniform, and on attaching the proper importance to each product by a system of weighting.

Such calculations are not appropriate to the analysis of the long-run effects of the tariff which are quite different in kind from these estimated money gains and losses. Such effects consist, as has been stated before, in a different distribution of capital and population and in a modification in the valuation of immobile resources. In a period of expansion, when export regions are being drawn closer to world markets by cheapening transportation, when investment is active, population increasing and land values rising, the existence of a protective tariff will lessen the rise of "resources" incomes and values and temper the increase in population, in these regions while somewhat heightening the increases in the regions where protected industries are dominant. Real income per head will probably be lower in all regions, but incomes from immobile and specialized resources will be the only ones differentially (by regions) affected to a substantial degree. The concept of regional "gains" or "losses" as long-run results of a protective tariff is not a useful one in that it does not shed much light on the course of development.

Even when made with the greatest accuracy, all that such calculations can be made to show is the immediate and temporary or "impact" change in the prices of a list of products, which would result from a removal of the import duties on them. They do show, however, and in the case of the differences-in-prices method show conservatively, the magnitude of the increase in regional income, in the form of reduction of the costs of production of exports, which could be given to an export region by the removal, or *pro tanto* the reduction, of protective duties. This is of importance to all export regions but particularly to the Prairie Provinces which by the beginning of the depression were experiencing a severe worsening of their competitive position as against producers in European importing countries and where by the same time Dominion development expenditures had pretty well exhausted their effects in promoting increasing land values. The full regional advantage thus estimated would, of course, be gained only if any losses, which might result in the transportation field from the effects of such a change in policy, were absorbed by the rest of the Dominion.

This question of the calculation of tariff "burdens" has been dealt with at length not in order to minimize the importance of the protective tariff as a factor in Dominion-provincial relations nor yet to suggest that export regions have not a strong interest in seeking its reduction; it has been considered at length because such calculations, useful as they may be in suggesting the magnitude of the differences which might follow a change in tariff, create a false impression of the nature of the inter-regional strains which a high-protectionist policy is likely to create in a federal state. In terms of regional incomes per capita as recorded in Chart IX, they do not throw light on the essential element, viz.; the disproportionate decline in the per capita incomes of regions such as the Prairie Provinces and British Columbia.

4. *Some Regional Long-run Effects*

It is not possible to give a quantitative statement of the *long-run* effects of the protective policy on the different regions of the country. Some descriptive probabilities may be stated. Without the protective tariff, Ontario and Quebec would have had a smaller fraction of the Dominion's population than they now have. Industrialization and urbanization, particularly in the development of great metropolitan areas, would have been less. This is not to say that the centre of gravity of population and manufacture would have been outside these provinces. They have great natural advantages and for certain manufacturing industries are economically related to the heavy-industry focus of the continent. Further they have developed great export industries within their own boundaries and this development of the past 20 years has been revolutionary in its scope. Yet interprovincial trade in manufactures is large. Some evidence of the concentration of manufacturing in Ontario and Quebec has been given in Chapter V, Section 8. A special enquiry by the Dominion Bureau of Statistics from 1,973 firms has made it possible to distribute regionally the sales of 23 manufacturing industries (largely protected industries) located in Ontario and Quebec:—

Percentage Distribution of the Sales of Ontario and Quebec Manufactures, 1929, Twenty-three Industries

Total Domestic Sales	British Columbia	Prairie Provinces	Maritime Provinces	Ontario and Quebec
100	5	18	6	71
Population (1931)	7	23	10	61

Thus these 23 manufacturing industries were dependent for 29 per cent of their sales on the other regions. Their sales were about 41 per cent larger than if they had been restricted to the Ontario-Quebec region alone. While these sales to other regions were not wholly dependent on the tariff it cannot be doubted that without the tariff the Maritime Provinces would have purchased more largely from Britain and from New England, that the industrial areas from Detroit to Minneapolis would have shared more largely in the prairie market, and that British Columbia would have purchased more in Great Britain, the United States and Japan. Some significant fraction of the population of Central Canada is dependent on these sales to other regions. As has been said before, however, this does not mean that per capita incomes in Central Canada were higher because of these protected sales. It may equally well be that more people were gainfully occupied at the same or even lower incomes. Since, however, the tariff has made easier monopolistic exploitation and has encouraged urbanization and the growth of metropolitan centres which in turn have by a process of "agglomeration" drawn to them further manufacturing and service industries because of the market, skilled labour, and industrial and financial services available, there is a presumption that it has increased the proportion of higher and more easily taxable incomes and capital values. These are associated with the more skilled industrial occupations, with executive and financial services, and with the greater importance of corporate incomes.

The general effect of the tariff on the Prairie Provinces has, of course, been to direct the purchases of this export region eastward to Ontario and Quebec and to a much less extent to the Maritime Provinces, and westward, particularly for lumber, to British Columbia, rather than south-eastward to the closer markets of the United States. To some extent, the British preference has directed trade to the United Kingdom either through Vancouver or the eastern ports. The direction of these purchases has been of importance to Canadian railways.

Unquestionably, these purchases cost the people of the Prairie Provinces more than had no tariff existed. Against this higher cost, however, there is a partial offset of the abnormally low freight rates on wheat. These rates, which are lower than comparable rates in the United States, are made possible only by return traffic paying higher rates or by payment of railway deficits out of general taxation or by both. The tariff has been an important factor in the creation and maintenance of that return traffic.

It has been pointed out before that the per capita incomes in the Prairie Provinces which have been differentially affected by the protectionist policy are those of owners of resources specialized in the production of export commodities. Broadly speaking, these incomes had not up to 1930 been *reduced* by the tariff; the tariff had been a relatively constant factor throughout the whole period of expansion.[30] Rather the increases in these incomes and land values, resulting from developmental expenditures (largely Dominion) in improving transportation and other facilities and from increased world demand from export wheat, had been tempered or curbed by the existence of a tariff. From 1930 on the effects were of a different kind.

Within the region itself the tariff has probably affected population distribution and property values. It has presumably increased the metropolitan position of Winnipeg as against competition from Minneapolis-St. Paul and increased the values of certain coal resources.

The economic expansion of British Columbia had, on the whole, been curbed by the existence of the tariff. This was, however, much more clearly true after the opening of the Panama Canal and the expansion of her mining industry than before. Previously her protected market for lumber and fruit on the prairies had been a very important element in her economy. It would have been a nice question to decide whether she would have gained more by the presumed greater expansion of the prairie market under free trade than she would have lost through exposure to United States competition in that market.

When British Columbia emerged as a dominantly export region in the early twenties, the tariff became more definitely restrictive. It curbed to some degree the expansion of the major export industries. Those industries had, however, experienced so favourable a turn of circumstances in transportation and technique that the limiting effect of the tariff was little felt. It was with the decline in prices after 1929 and with the increase in tariff protection that the restrictive effect became important.

[30] An exception may be made for the period of falling prices after the break of 1920 when the increased weight of specific duties was in effect an increase in the tariff.

The case of the Maritime Provinces has been of a different sort. Changes in the technique of ocean and land transportation, and shifts in world production and markets which had improved the competitive position of the Prairie Provinces had worsened that of the Maritimes. Moreover, the protectionist policy had been a new factor, not one which antedated the development of Maritime industries.

Changing circumstances, particularly in the last quarter of the nineteenth century, had been against the traditional export industries of the Maritimes. The worsening fortunes of the cane-sugar producers of the West Indies, the obstacles of the United States tariff to the development of the fresh-fish trade and the growing competition from Newfoundland and Norway had borne heavily on the fishing industry. The lumber industry had suffered from depleted resources, barriers to entry to the United States market, and the improvement which the Panama Canal had occasioned in the competitive position of the Pacific Coast producers. Coal had lost out as an export commodity partly because of the United States tariff but mainly because of the development of superior United States resources. Shipping and shipbuilding had declined with the wooden ships.

While accelerating the decline of the old export industries, the protectionist policy offered enlarged Canadian markets for coal and steel and a few specialized manufactures. Through these industries Nova Scotia shared in the expansion associated with western settlement but the share was proportionately less than that of Central Canada or of British Columbia.

Though it is difficult to reach a precise conclusion, improved transportation appears to have been more successful in opening the Maritime market to Central Canada than in opening the Ontario and Quebec markets to the Maritime Provinces. Exposed to competition from Central Canada and the West, Maritime agriculture contracted and sought refuge in more specialized products. Increasing centralization and the enlarging scale of manufacture have handicapped Maritime manufacturers with their small local market. For those industries, such as the coal and steel industries, which have large markets in Central Canada, it is significant that the largest part of their market is highly competitive and marginal.

In population and economic development the Maritime Provinces failed up to 1930 to keep pace with the expansion of other regions. Whereas, however, in the Prairie Provinces the effect of the tariff was in the direction of curbing the growth of exports and population and the rise of land values, in the Maritime Provinces the effect was in the direction of accelerating the contraction of exports and of accentuating falling population and declining value of resources in those export industries which could not turn to the domestic market. In the Prairie Provinces the tariff (1878-1887) was one of the given conditions of development; in the Maritime Provinces it was a marked change in policy affecting communities established and developed under quite different conditions. The tariff was not the fundamental cause of the worsened position of the Maritimes; other influences went much deeper. As has been already explained many economic factors, other than the tariff, turned against the Maritimes in the last quarter of the nineteenth century.[31] The protectionist policy encouraged the growth of the steel and coal industries but in communities dependent on the traditional export industries, it accentuated the difficult problems associated with a declining population in which the higher age-groups were increasingly important, and with declining rates of local investment. It presumably restricted the revenues of provincial governments and increased the expenditures necessary to cope with the problems of declining industries and declining areas.

5. *The Impact Effects of Tariff Changes*

It has been argued in sections 2 and 3 that the most significant differential effects on regional incomes of a protectionist policy in Canada are the result of *changes* in the tariff, not of its existence. The adage, "An old tax is no tax," is applicable.

Such changes would always have differential effects on the incomes of industrial groups. There would be no *regional* problem, however, if such industrial groups were evenly spread over all regions. It is only because there has developed in Canada, as has been explained at length in earlier chapters, a relatively high degree of regional specialization in export industries and industries producing for the home market that tariff changes have differential effects regionally.

Effective tariff changes may be in the form of (1) simple changes in rates; (2) effective changes resulting from changed administrative procedures; and (3) changes in the weight of specific and compound duties resulting from rising or falling prices.

[31] See S. A. Saunders, *Historical Summary of the Economic Development of the Maritime Provinces.*

In the period 1930-1932, changes of all these types took place and all, in general, in the same direction. Tariff rates were greatly increased, the number of specific duties was increased, sharply falling prices increased their weight, and administrative changes were in the direction of increases in the effectiveness of protection. In the period 1932-1936, the main modifications made in this higher tariff level were through trade treaties, of which the most important were the Ottawa Agreements of 1932 and the United States Trade Agreement of 1935. This policy of tariff reduction by trade treaty was carried further in the United States Trade Agreement of 1938.

It is impossible to review in detail the multiplicity of tariff changes in these years and yet present a general view of changes in the aggregate. In an attempt to measure with consistent approximation the magnitudes and effects of tariff changes, a fresh approach to the problem has been made. The results, some of which are presented in Tables 17, 18, and 19, make available for the first time measurements of tariff changes which are comprehensive and comparable. Statistics of home production and imports made it possible to relate diversion of trade to changes in tariff rates. Because of the inadequacy of Canadian trade statistics, the calculations are not entirely free from error but the errors are definitely on the side of understatement of the height of tariffs and of increases during this period.

Rates of duty under preferential, treaty, and general tariffs, have been calculated from the *ad valorem* rates and the *ad valorem* equivalents of specific and compound duties computed from customs valuations. Rates (except in a few cases of specific duties) have been included whether or not there were importations under the classification, and rates of zero have been included for free goods. The 3 per cent excise tax has been included but sales taxes and other taxes bearing equally on imports and domestic production have been excluded. Furthermore, since the necessary information was not available, dumping duties were not included and no adjustments were made for drawbacks. The computations have been limited to manufactured goods. These calculations tend to understate the duty somewhat since heavy rates are likely to be prohibitive for the lower-priced articles in the range covered by the item. The percentage shown is that which the duty bears to the higher-priced articles in the range the lower-priced articles being excluded. This is likely to be the case where the percentage of imports to domestic production is small. Further when an arbitrary valuation has been applied that valuation becomes the recorded customs valuation. If the arbitrary valuation was to any degree excessive the percentage of the duty is stated as less than it would be to the ordinary market value. Further, it should be made clear that such calculated rates of duty are less than the rates of protection on Canadian processing of materials. They would be equal to the rates of protection only if imported materials were charged the same tariff rates as those levied on the finished products, or if the prices of domestic materials used exceeded foreign prices by as much as the rate of duty on the finished products.

It has not been possible to relate domestic production to imports for individual items but only for groups. It has, therefore, been necessary to arrive at representative rates of duty for groups of imports although the rates for important individual items are also quoted. Representative rates were calculated by taking the unweighted average of the rates on individual items including free items but not unmanufactured materials. This method has the advantage that changes in rates which are effective in diverting trade are not minimized. The numbers of items included in the general averages are sufficiently large that the absence of weighting creates no serious error. Where, in particular groups containing few items, the averages appeared unrepresentative, rates for the most important item were substituted.

Though all items in the tariff were analyzed, attention is centred on the textile and iron and steel schedules since under them about one-half the imports of manufactured goods are entered and since it is impossible to review here in detail all schedules.

Table 17—Tariff Changes 1928-1937

(Production figures for calendar years shown: imports and duties for fiscal years ending March 31 following year)

—	Equivalent *Ad Valorem* Tariff Rates (Unweighted Averages)			Gross Value of Canadian Production	Ratio of Imports to Gross Value of Production ([a]) (percentage)			
	Preferential	Treaty ([b])	General ([b])	(thousands of dollars)	Preferential	Treaty ([b])	General ([b])	Total
Cotton Textiles................1928	13	20	24	79,220	14	2	20	35
1933	21	30	37	51,180	14	2	7	23
1936	15	32	39	65,635	15	7	....	22
Silk and Artificial Silk..........1928	15	23	29	10,897	50	136	64	250
1933	22	32	39	22,755	6	7	9	22
1936	15	36	47	26,931	7	10	1	18
Wool Textiles..................1928	19	24	28	34,687	82	15	12	108
1933	32	57	53	29,360	37	1	2	40
1936	23	52	47	42,390	33	1	1	34
Clothing......................1928	20	27	33	222,615	5	2	5	13
1933	28	44	52	146,409	2	1	1	5
1936	24	46	54	191,401	3	2	1	5
Finished Textile Products.......1928	19	26	31					
1933	29	46	51					
1936	23	43	53					
Partly Manufactured Textile Products..................1928	15	23	24					
1933	21	33	39					
1936	16	39	26					
Total Textile Products..........1928	17	23	28	388,000	18	7	13	39
1933	21	39	45	280,000	10	2	4	17
1936	20	41	49	366,000	11	4	2	16

([a]) The value of Canadian production is "gross", *i.e.*, includes cost of materials purchased and the value of imports includes commodities in various stages of manufacture. Hence the absolute size of the ratio of imports to gross value of production does not necessarily measure the relative importance of imports and domestic production. However, *changes* in this ratio from one year to another do show the *changes* in the volume of imports in relation to home production. All that is intended here is to show such changes between 1928, 1933 and 1936.

([b]) Note that, after the U. S. Trade Agreement of 1935, the Treaty, and not the General Tariff as previously, applied to most of the non-preferential trade.

TABLE 17—TARIFF CHANGES 1928-1937—*Concluded*

(Production figures for calendar years shown: imports and duties for fiscal years ending March 31 following year)

—	Equivalent *Ad Valorem* Tariff Rates (Unweighted Averages)			Gross Value of Canadian Production	Ratio of Imports to Gross Value of Production (a) (percentage)			
	Preferential	Treaty (b)	General (b)	(thousands of dollars)	Preferential	Treaty (b)	General (b)	Total
Primary Iron and Steel.........1928	9	17	15	62,072	2	2	41	46
1933	10	26	19	18,493	4	1	10	15
1936	6	27	18	46,637	2	3	8	14
Castings and Forgings..........1928	13	19	20	81,905	1	....	12	13
1933	12	22	24	24,197	1	....	7	8
1936	7	22	25	44,045	1	4	3	8
Boilers, Tanks and Engines......1928	12	19	23	6,507	20	2	117	139
1933	13	26	28	4,445	5	2	26	32
1936	6	26	31	8,306	20	29	....	49
Agricultural Implements........1928	5	11	11	41,200	....	....	99	100
1933	3	17	23	5,326	1	....	39	40
1936	1	13	25	15,957	1	14	52	67
Machinery....................1928	13	20	21	51,046	7	1	114	123
1933	11	22	27	18,913	12	4	60	76
1936	7	21	28	41,447	7	59	11	77
Automobiles (Duty rates are for passenger automobiles valued at not more than $1,200 only) (c). 1928	13	18	20	162,867	....	....	26	26
1933	3	22	24	42,886	....	....	2	3
1936	0	21	27	105,350	1	9	....	10
Automobile Parts (duty rates are for automobile parts, n.o.p. only).......................1928	17	24	29	17,001	....	....	406	407
1933	18	31	39	13,001	....	....	147	147
1936	0	30	39	33,379	....	93	8	102
Wire and Wire Goods..........1928	11	17	19	18,847	4	....	18	23
1933	13	25	24	10,512	9	....	4	13
1936	9	20	21	18,369	9	1	2	12
Sheet Metal Products...........1928	7	12	13	49,847	9	....	68	78
1933	9	20	21	25,964	37	....	22	59
1936	6	19	22	39,994	29	11	30	70
Hardware and Tools............1928	15	23	27	25,132	5	1	25	31
1933	12	30	33	9,762	10	1	19	30
1936	8	28	32	17,791	7	11	9	26
Total Iron and Steel Products...1928	11	17	19	632,000	3	1	51	54
1933	10	23	25	212,000	8	1	24	33
1936	6	21	25	434,000	5	21	8	34
Finished Iron and Steel Products..1928	13	21	22					
1933	13	26	29					
1936	8	22	29					
Partly Manufactured Iron and Steel Products...............1928	7	9	12					
1933	8	14	19					
1936	5	20	19	....	....	....	....	....

(a) The value of Canadian production is "gross", *i.e.*, includes cost of materials purchased and the value of imports includes commodities in various stages of manufacture. Hence the absolute size of the ratio of imports to gross value of production does not necessarily measure the relative importance of imports and domestic production. However, *changes* in this ratio from one year to another do show the *changes* in the volume of imports in relation to home production. All that is intended here is to show such changes between 1928, 1933 and 1936.

(b) Note that, after the U. S. Trade Agreement of 1935, the Treaty, and not the General Tariff as previously, applied to most of the non-preferential trade.

The tables are helpful in discerning four types of changes. In the first place they show on a consistent basis the changes in tariff rates. In the second place, they show the diversion of purchases from imports to home production or *vice versa.* In the third place, they show the diversion of import purchases from countries enjoying one tariff to those enjoying another, e.g., from general to preferential rates. Fourthly, the production figures give some indication of the contraction of home production during the depression. Since, however, they are value and not volume figures apparent contractions are in varying degrees the result of price declines. Care should be exercised in interpreting the ratio of imports to home production. The absolute level of the percentages is likely to be biased by the fact that of two industries turning out the same values of finished goods the one which is fully integrated and sells nothing but finished goods will show a lower gross value of production than the one in which goods are bought and sold at several stages of manufacture. *Changes* in these ratios are, however, significant.

It is to be noted that the tariff increases, 1929 to 1932, were very great. They were greater in textiles than any which had taken place since 1879. The increases in iron and steel duties were less great but amounted to nearly a third on the general tariff. There were also substantial increases in other schedules which cannot be as readily summarized as those in textiles and iron and steel.

Between 1928 and 1933 average rates on cotton textiles increased by more than 50 per cent of the 1928 rates under the general and preferential tariffs and by 50 per cent under the treaty rates. The increases for the larger items, grey fabrics and finished piece goods, were greater than the average. While home production of cotton textiles fell by more than one-third, 1928-1933, imports fell by about 60 per cent so that imports which had been 35 per cent of home production in 1928 were only 23 per cent in 1933. Imports under the preferential tariff had held their position relative to home production, the whole of the decline in percentage having been contributed by imports under the general tariff. Changes, 1933-1936, which reduced preferential rates and extended treaty rates to United States trade, eliminated trade under the general tariff and increased somewhat the ratio of preferential imports to home production. They did not, however, increase the ratio of total imports to the substantially increased home production.

The diversion in the silk industry was particularly great partly because the relatively new artificial silk industry had strong elements of growth in it and partly because the increases in rates were very great.

—		Equivalent *Ad Valorem* Tariff Rates		
		Preferential	Treaty	General
Rovings, yarns, and warps, wholly of artificial silk, not more advanced than singles, not coloured	1928	13	18	20
	1933	34	37	58
	1936	13	37	71
Woven fabrics, wholly or partly of artificial silk, not containing wool, and not fabrics chiefly of real silk	1928	18	31	35
	1933	53	73	69
	1936	20	83	90

In the case of wool textiles, imports under general and treaty rates had been small but those under preferential rates had been very large. The diversion from imports to home production was so large that contraction of the gross value of production, 1928-1933, was relatively small and production by 1936 was considerably higher than in 1928. The increase in rates for individual large items was greater than for the group as a whole:—

—		Equivalent *Ad Valorem* Tariff Rates		
		Preferential	Treaty	General
Wool cloth, flannels, overcoatings, tweeds, worsteds, and serges, woven fabrics with cut pile and woven fabrics, n.o.p.	1928	25	29	35
	1933	45	58	67
	1936	37	53	72
Blankets, n.o.p.	1928	20	27	35
	1933	44	59	76
	1936	37	60	107
Carpets, mats and rugs (wool)	1928	23	27	35
	1933	43	68	79
	1936	37	142	77

These increases, 1928-1933, wiped out three-fourths of the imports of woollen fabrics, more than 90 per cent of the imports of blankets, and six-sevenths of the imports of carpets. Though the domestic production of woollen textiles was almost one-fourth higher in value in 1936 than in 1928, imports were considerably less than half what they had been in the earlier year.

Though the increases in rates were of a much lower order in iron and steel products, the diversion from imports to domestic production was substantial. Of all groups, imports were 54 per cent of domestic production in 1928 and 33 per cent in 1933 of a production reduced by two-thirds. The effects of the United States Trade Agreement of 1935 are seen in the slight relative increase in imports (33 to 34 per cent) and in the transfer of imports from the general to the treaty tariff.

It is not desirable to analyze all the tariff schedules by these methods. Other classifications are less satisfactory than in the cases of textiles and iron and steel and hence it is more risky to relate imports and production. A number of important groups are, however, presented in Table 18. The experience in these groups varied. The 50 per cent increase in the general rates and the 25 per cent increase in the treaty rates on petroleum products were effective in reducing the relative position of imports. Increases of more than 25 per cent of the 1928 treaty and general rates on electrical apparatus and supplies cut down heavily the proportion of imports to production, while preferential imports were maintained. Subsequent reductions and the extension of treaty rates to the United States permitted imports to gain slightly more than proportionately. Increases on boots and shoes, less relatively under preferential rates than under the other rates, cut down the already small imports under all three tariffs.

TABLE 18—TARIFF CHANGES 1928-1937

(Production figures for calendar years shown; imports and duties for fiscal years ending March 31 following year)

—	Equivalent *Ad Valorem* Tariff Rates (Unweighted Averages)			Gross Value of Canadian Production	Ratio of Imports to Gross Value of Production ([a]) (percentage)			
	Preferential	Treaty ([b])	General ([b])	(thousands of dollars)	Preferential	Treaty ([b])	General ([b])	Total
Glass and its Products..........1928	13	19	22	13,565	9	16	47	72
1933	12	23	26	7,831	11	7	38	56
1936	7	20	25	11,095	13	38	16	67
Petroleum Products............1928	9	12	14	83,122	....	....	33	33
1933	10	15	21	70,268	....	....	13	13
1936	7	16	18	85,802	....	8	4	12
Electrical Apparatus and Supplies 1928	15	23	27	93,672	2	....	29	32
1933	16	30	34	37,013	2	....	15	17
1936	12	29	33	72,289	2	14	2	18
Leather........................1928	11	14	16	35,202	4	....	13	17
1933	13	24	26	16,475	5	....	9	14
1936	10	25	25	23,294	6	2	5	13
Boots and Shoes................1928	16	27	29	51,427	2	....	4	6
1933	24	37	43	33,358	1	....	1	2
1936	20	37	43	36,906	1	2	....	3

([a]) The value of Canadian production is "gross," *i.e.*, includes cost of materials purchased and the value of imports includes commodities in various stages of manufacture. Hence the absolute size of the ratio of imports to gross value of production does not necessarily measure the relative importance of imports and domestic production. However, *changes* in this ratio from one year to another do show the *changes* in the volume of imports in relation to home production. All that is intended here is to show such changes between 1928, 1933 and 1936.

([b]) Note that, after the U.S. Trade Agreement of 1935, the Treaty, and not the General Tariff as previously, applied to most of the non-preferential trade.

TABLE 19—TARIFF CHANGES 1928-1937—ALL MANUFACTURES

(Production figures for the calendar years shown; imports and duties for fiscal years ending March 31 following year)

—	Equivalent *Ad Valorem* Tariff Rates (Unweighted Averages)			Imports (millions of dollars)				Gross Value of Canadian Production ([c])	Ratio of Imports to Gross Value of Production ([a]) (percentage)			
	Pre-ferential	Treaty ([b])	General ([b])	Pre-ferential	Treaty ([b])	General ([b])	Total	(millions of dollars)	Pre-ferential	Treaty ([b])	General ([b])	Total
1928...........	12	17	21	143·6	55·7	704·2	903·5	3,582·7	4	2	20	25
1933...........	14	25	30	86·7	16·8	156·1	259·6	1,981·5	4	1	8	13
1936...........	10	24	30	110·4	182·0	128·2	420·7	3,035·4	4	6	4	14

([a]) The value of Canadian production is "gross", *i.e.*, includes cost of materials purchased and the value of imports includes commodities in various stages of manufacture. Hence the absolute size of the ratio of imports to gross value of production does not necessarily measure the relative importance of imports and domestic production. However *changes* in this ratio from one year to another do show the *changes* in the volume of imports in relation to home production. All that is intended here is to show such changes between 1928, 1933 and 1936.

([b]) Note that, after the U. S. Trade Agreement of 1935, the Treaty, and not the General Tariff as previously, applied to most of the non-preferential trade.

([c]) Production excludes Central Electric Stations and Dyeing, Cleaning, and Laundry Work.

A general view of tariff and trade changes is given in Table 19. The summary is not inconsistent with the more detailed tables for specific classes of goods. The small increase in preferential rates, 1928-1933, is the summary of large increases on some items and small increases or decreases on other less competitive items. The curtailment and diversion of total trade is marked, as for most of the individual items. Preferential trade maintained its position relative to production while treaty and general tariff trade were subject to drastic curtailment. From 1933 to 1936 preferential trade shared equally with Canadian production in the increased business while treaty and general trade had a somewhat increased share. The United States Trade Agreement of 1935 transferred a large volume of trade from general to treaty rates.

This analysis discloses only a few facts but those are highly relevant. The increases in the tariff between 1928 and 1933 constituted the most substantial tariff changes made since 1879-1887 when the National Policy was put into effect. Not only were the increases great in magnitude but they were singularly effective in diverting purchases from imports to home production. There was some, but much less, diversion to imports under preferential rates. The products in the purchase of which the diversion was greatest were predominantly products of the central provinces though in important instances such as iron and steel, coal, and petroleum products, other provinces shared in the protection. It must not be assumed that the prices of the protected products were higher than duty-free prices by the full amount of the duties. In some cases that was true; in others, the great decline of imports is the basis for a strong presumption that in many lines the higher duties were completely prohibitive and Canadian prices could not be maintained above duty-free prices by the full extent of the duties. They could not be so maintained either because of competition within the Canadian market or because the maintenance of controlled prices at so high a level would have unduly restricted the producers' sales. There are very few cases, however, in which there is a presumption that the tariff increases did not to *some* degree enhance the differential between Canadian prices and duty-free prices.

The reductions made since 1933, and the United States Trade Agreement of 1935 by which the treaty rates replaced the general rates in importance, have not generally increased the relative position of imports. In most items the treaty rates in 1936 were still much above the general rates of 1928. This was conspicuously true in the textile schedules but on the other hand agricultural implements and automobiles were important exceptions.

The primary object of tariff increases in this period was to maintain employment in the protected industries at a higher level than would otherwise have ruled. A secondary object was to create a bargaining advantage whereby preferred entry into other markets could be obtained for Canadian exports.

The great diversion of purchases from imports to home production is *prima facie* evidence that employment was maintained at a higher level. In so far, however, as home products could be purchased only at higher prices than imports, purchasers, unless their incomes had been increased, were forced to curtail their purchases of these and other goods and services, thus contributing to unemployment or to the reduction of incomes of workers "on their own." Where the increase in duties required to bring about the desired diversion of purchases was great, as for example in the textile schedules, the presumption is that the *net* advantage in employment was small.

If the degree of the effects of these tariff increases is difficult to measure, the direction of them is clear. If the effect of the increases was to improve relatively employment in the protected industries, that improvement was concentrated not wholly but to a high degree in Ontario and Quebec. Table 12 on p. 50, showing manufacturing industries highly concentrated in Ontario and Quebec, includes most of the leading industries for which protection was sharply increased. The major exception to this concentration was the undoubtedly substantial advantage gained by the Nova Scotia steel and coal industries. In so far as prices of protected products were maintained above the level which would otherwise have obtained, that enhancement contributed to a reduction of the real incomes of export groups and of regions in which the protected industries were of minor importance.

The tariff increases could be considered to be without differential regional effects only if it was assumed (*a*) that there was no maintenance of employment and (*b*) no enhancement of prices in the protected industries or no maintenance of such prices above world prices plus the former protective duties.

There was, however, a secondary object of the tariff increases, *viz.,* to create a bargaining advantage whereby preferred entry into other markets could

be obtained for Canadian exports. The trade treaties gave advantages of varying importance to the export regions. Chart I on page 48 shows clearly the great advantage to the British Columbia lumber industry of the British preference on lumber in conjunction with low ocean freights and the British building boom. It shows also the expansion of shipments to the Atlantic coast (mainly the United States) subsequent to the United States Trade Agreement of 1935. Both the British lumber preference and the apple preference have been of substantial benefit to New Brunswick and Nova Scotia, though for New Brunswick, whose most important lumber areas are now inland, rather than tributary to the Atlantic Coast, the United States Trade Agreement of 1935 was of greater benefit. The bacon preference has been at least of potential advantage to all agricultural provinces. The preference on base metals has been admittedly of slight advantage. Though at times the preference on wheat may be helpful, it is difficult to discover any substantial advantage with exportable surpluses as large as Canada and Australia have had since 1932.

On the basis of changes in the tariff by legislation and treaty it is clear that the net disadvantages of the prairie region have been greater than those of the other export regions. Though the Maritime Provinces had substantial offsets in protection and preferences to the disadvantages of their export industries under tariff increases, there was no relief in these policies for the declining fishing industry. It should not be overlooked, in considering the importance of the trade treaties, that from 1930 to 1932 there were no offsetting advantages gained from preferences.

As has been said before, it is not possible to approximate the magnitude of the effects of tariff *changes* on regional incomes, nor to assess with any useful degree of accuracy the "loss of income" to be attributed to the tariff or any other policy. In so far as the preferences gained were not a complete offset, real incomes in the predominantly export regions were reduced by the tariff increases. They were reduced because the tariff increases in a period of declining prices tempered the decreases in protected prices while the export prices were fully exposed. One must not leap to the conclusion, however, that the full decline in the purchasing power of the products which the export regions had to sell is to be accounted for by changes in the tariff. Even had they been able to purchase in a free trade market, those regions would have experienced a great worsening in their "terms of trade" because of the economic characteristics of the predominantly raw material sales and of the mainly highly-processed purchases. In any general decline of prices during a depression, prices of raw materials may be expected to show an earlier and greater decline than prices of highly processed goods. This is likely to be true regardless of the existence of tariffs or of monopolistic control of prices. The tariff increases aggravated but did not occasion the fall in the purchasing power of the export regions. The fact of this aggravation is clear but its extent cannot be accurately computed. The conclusion is inescapable that effective increases in the tariff to an unmeasured but substantial extent, increased the economic pressure on the predominantly export regions of the country and indirectly contributed to the financial burdens of the provinces concerned, burdens which the Dominion has been forced, since 1930, to assume in part.

Canada is a country of specialized exports and has a high degree of regional specialization. It is characteristic of those exports (except gold, nickel, and probably, under more favourable circumstances, newsprint) that, in periods of price fluctuation, their prices are likely to experience extreme fluctuations. That is a basic fact of the Canadian economy. To the degree that the protective tariff is high, i.e. contains many prohibitive duties, thus isolating protected prices from world prices; in so far as it contains many specific rates which remain rigid in the face of falling prices; to the extent that effective tariff rates are sharply increased by administrative or legislative action in order to spare producers for the home market the shock of falling prices, or to increase their share of the home market, or both—it will, in the face of major price declines, exaggerate the distortions of the price structure and thrust disproportionate contractions of real income on specialized export regions. The greater the effective increases in tariff rates required to bring about the desired shifts in purchases, the greater the degree to which regional real incomes will be differentially affected. These money incomes will have already been depressed in the face of relatively rigid costs of government and public and private debt charges. Effective tariff increases will increase the rigidity of the costs of living and of carrying on business. The greater, therefore, will be the likelihood that governmental finance will be called upon to be the instrument for bringing about large inter-regional transfers of income. These conclusions remain unaffected whether the protective tariff is considered for the economy as a whole as a desirable or an undesirable policy.

B. Transportation Policy

1. *Developmental Policy*

Dominion railway policy, as it has been reviewed, has been, on its developmental side, a long record of attempts to promote the development of the resources of the different regions and inter-regional trade through the medium of all-Canadian transportation facilities. So clearly was it an object of national policy not merely to develop the country but to promote national economic integration, that, by cash subsidies, land grants, bond guarantees, and government construction, the Dominion government itself dominated the laying out of the railway system and repeatedly over-rode purely commercial considerations to satisfy the desires of particular regions and to maintain all-Canadian routes and foster Canadian ports.

It is a matter of common knowledge that this policy resulted in higher construction and operating costs. In part, the higher construction costs were met by Dominion subsidies, land grants, tax-exemptions, etc., or Dominion construction; in part, they were carried into a rigid financial structure by Dominion bond guarantees.

In the light of the present day, the scale of the Canadian railway system was clearly over-optimistic. In so far as it was not biased in this direction by purely political and regional pressures, the error rested on mistaken estimates of resources and limits of development and on a complete lack of any anticipation that, in certain types of transportation service and in certain areas, the railway was doomed to obsolescence.

2. *Rate Policy*

The railway rate structure in its regional aspects determines the proximate distribution of railway costs among the several regions, in so far as those costs are not met by government payment of deficits or by failure of railway owners to receive interest on their capital. The rate structure determines to what degree different industrial and regional groups shall contribute to the payment of railway costs; in particular it determines the allocations of those costs of railway construction and operation which do not belong to any single region but which are the result of decisions to set up a system of all-Canadian transportation designed specifically to promote a Canadian rather than a North American integration.

Originally the rate structure was shaped by the existence of water competition, United States rail competition, by market competition (i.e. the desirability of so adjusting rates that producers could reach their markets and so contribute traffic), and by the differing operating costs in the several regions. Water competition, originally *via* Cape Horn and later and more extensively, *via* the Panama Canal, set the upper limits of Seattle-Chicago and, in turn, Canadian transcontinental rates. Water competition and United States rail competition determined that rates in the central (Ontario-Quebec) territory and in the Maritime territory should be low relative to those in the other regions; that is to say, had higher rates been charged, traffic would have been lost. Market competition led to the establishment of low ton-mile rates on basic commodities even where water and United States rail competition were absent. Without low rates, these bulky, low-value commodities could not reach any but restricted local markets. The absence of lower-cost competition and, in the Pacific territory, higher operating costs, determined that Prairie and Pacific rates should be higher. These territories, however, enjoyed low rates on basic commodities.

The outlines of the rate structure, thus roughly determined, have been profoundly modified by decisions of policy expressed in legislation or in orders of the Board of Railway Commissioners. As has been made clear in the summaries of transportation policy, the direction of such policy has been unmistakable. It has been toward low rates on basic commodities—rates lower than comparable rates in the United States—and toward the reduction of regional differentials or in the case of the Maritimes the restoration of favourable differentials. From the time of the Crow's Nest Pass Agreement down to the Maritime Freight Rates Act, policy, in the main, has moved in this direction. The result has been that transportation rates have been modified to the advantage of those regions least favoured by competitive influences. The chief, and important, exception was in the period 1913 to 1923 when rate changes were distinctly adverse to the Maritime Provinces.

It is not always easy to determine who receives the direct benefit of reduced transportation rates. Conditions of demand and supply may be such as to divide it in various proportions. Two cases, however, are fairly clear. A region selling products in competition with other regions or countries in a world market, or in a series of markets so interrelated as to constitute in effect a world market,

will receive a large share of the direct benefit of differential rate reductions, i.e., of rate reductions applicable to its products and not to those of competing regions and countries. The proportion of the benefit received will depend on how large a fraction of the total market the region supplies. If the fraction is small, the region will receive virtually all the direct benefit; if it is very large, it will receive little. A region buying products in another region or country but taking only a small fraction of the total output will likewise receive virtually the full benefit of differential rate reductions in so far as the products are sold competitively and not under restricted competition. If the conditions of sale are monopolistic, sellers will be able, to a greater or less degree, to practise regional discrimination in pricing so as to retain for themselves part or, in case of complete monopoly, all of the direct gain from differential rate changes. Regions such as British Columbia and the Prairies have by reductions in the rates on basic commodities made large gains of the first sort. By reductions in regional differentials, they have made gains of the second sort, but, by reason of the existence, to a very considerable extent, of monopolistic restrictions and price differentiation, these gains have been far from complete. (On the other hand, where discriminatory regional pricing is practised, it has usually favoured the regions remote from the point of production.)

If it is argued that it would be desirable that all regional differentials should be removed from railway rates, it is necessary to note that such a policy would involve the following accompaniments:—

(1) complete jurisdiction by a single authority over all alternative means of transportation, water, rail, road, and air; and

(2) the raising of rates on basic commodities and of rates generally in the regions most subject to highway and water competition; or

(3) the meeting of a part of railway costs out of taxation through payment of railway deficits by government.

The second is not possible without the first and if the first two are rejected, the third is very difficult to avoid.

C. Monetary Policy

The third major field of Dominion economic policy which has had regional significance in recent years is that of monetary policy. Though some aspects of banking legislation had given rise to conflicting regional attitudes from time to time, monetary policy as such was not a subject of extended controversy until the onset of the Great Depression. Previously the conventions of the gold standard had been accepted with but little question.

As with tariff and transportation policies, attention is here directed not to the wisdom of the monetary policy pursued since the crisis of 1929 but only to its regional aspects. Regional effects are difficult or impossible to isolate and to measure with any useful degree of accuracy but their direction can be discerned fairly clearly.

Since a special study on *Dominion Monetary Policy* has been submitted by Professor F. A. Knox, it is necessary to give here only brief consideration to the relevant facts and to the conclusions reached, and to point out the relations to other policies.

The Canadian dollar had shown weakness in 1928 and 1929 but returned to parity by 1930, and until September, 1931, when the gold standard was abandoned by Great Britain, remained at approximate parity with the United States dollar and the pound sterling. To this result, the sharp increase in the tariff in 1930 and Dominion government borrowing in New York in the same year contributed. Quantitatively, however, other capital imports were of much greater importance in maintaining the value of the Canadian dollar. Though Dominion policy looked toward the maintenance of the value of the dollar and identified Canadian credit standing with it, the policy would have been ineffective, had not circumstances, over which the Dominion had no control, contributed to the result. Two of Canada's chief agricultural competitors in the European market had, during this period, experienced depreciation of their currencies in terms of the pound. Argentina's currency was so depreciated after December, 1929, and Australia's after December, 1930. In neither case was the depreciation at that time the result of deliberate policy; it was forced by circumstances affecting each country's balance of international payments.

From September, 1931, to April, 1933, the Canadian dollar was at a discount in New York but, because of the depreciation of sterling, at a premium in London in terms of the old parities. While the Australian and Argentine currencies maintained or increased their depreciation in terms of sterling, the Canadian dollar *appreciated* in terms of the same currency in which the bulk of our exports were sold.

A necessary result of such appreciation was that export prices in sterling were converted into prices lower in Canadian currency by the amount of the appreciation. From the last quarter of 1931 on, both Australia and Argentina intervened in the foreign exchange market to control the relations of their currencies to sterling. There was no such intervention by the Dominion except in a minor way through the timing of gold exports and debt payments abroad.

In April, 1933, the abandonment of the gold standard by the United States and the withdrawal of large balances from Canada quickly brought the pound sterling, the United States dollar, and the Canadian dollar back to levels close to the old parities with one another but at much reduced gold values. This realignment of the major currencies in conjunction with sharp recovery in the United States and increased international purchases of raw materials was followed by an important rise in the wholesale prices of Canadian export products. Thereafter controversies over monetary policy were concerned to only a slight degree with the external value of the dollar and mainly with the level of prices and interest rates.

The appreciation of the Canadian dollar in terms of sterling in 1931-32 could have been prevented only by positive action of the Dominion government to lower the external value of the dollar. Only to a limited extent had government policy (principally tariff policy) been of influence in maintaining the Canadian dollar midway between the pound sterling and the United States dollar. That position was the result of all the circumstances affecting the Canadian balance of international payments. Proposals for such positive action were advanced, principally by representatives of export industries, but were rejected on various grounds of which the clearest were the desirability of safeguarding the credit standing of the Dominion and the risks of "inflation."

The inter-related policies actually pursued 1930-33, though laid down piecemeal with only partial knowledge of the swiftly changing circumstances, fitted into a fairly definite pattern.

The upward revision of the tariff, which as has been shown, was to a marked degree effective in enabling protected producers to obtain a larger share of a much reduced Canadian market, was designed to maintain employment in the protected industries at a higher level than it was considered could otherwise be maintained. The vigorous and extended application of dumping duties and arbitrary customs valuations afforded effective protection against imports from countries whose currencies were depreciated in terms of the Canadian dollar; it also was intended to contribute to the maintenance of employment.

The object of the trade treaties was to improve employment and incomes in export industries while at the same time maintaining existing protection. The treaties of 1932 gave substantial advantages to lumber, bacon, and apple producers and advantages of slighter or nominal extent to producers of wheat and base metals. Little was done by means of tariff or trade treaty to protect the positions of the wheat producer and the fish producer (except for canned fish) or of many lesser export interests.

The support given to Canadian wheat prices through the accumulation of wheat stocks by the Central Selling Agency of the Wheat Pool financed by the Dominion and the bonus of 5 cents a bushel paid by the Dominion on wheat of the 1931 crop, were offsetting policies whose total effect, either individually or in conjunction with other policies, it is impossible to calculate with any useful accuracy.

These policies had, however, the important effect of increasing the need for inter-regional transfers of income, that is, of using the Dominion fiscal machinery to aid individuals and governments in some regions, out of revenues and loan-receipts derived from others. The fact that the Canadian dollar did not depreciate, 1931-33, as much as sterling brought additional pressure on the export areas at a time when they were already in acute distress. It is impossible to make any quantitative estimates of the losses involved since the effect of further exchange depreciation on the volume and price of each export would vary with the characteristics of its market and its competitive position. In the frequently cited case of wheat the probable results are particularly obscure because of the interposition of the government selling agency which was already supporting Canadian wheat prices above world levels. It is impossible to divine what would have been the reaction of government wheat-selling policy to further depreciation, and in view of the importance of this arbitrary factor, equally impossible to hazard any estimate of the net effect on Canadian wheat prices and producers' incomes. It seems clear from the position of the wheat market therefore that there would not have been any automatic gain to western

producers from exchange depreciation alone, but that gains would have been possible if appropriate government wheat-selling policies had been combined with exchange depreciation.

There were, however, a number of exports which would have benefited to a substantial extent in either increased price or volume or both. This relief to the hardest pressed group of industries in the country would have assisted in correcting many of the serious disequilibria which threatened the continued operation not only of the export areas themselves but of the whole economy. There can be no doubt that the appreciation of the Canadian dollar *vis-a-vis* sterling in conjunction with tariff policy greatly increased the economic pressure on export areas in general and thereby increased the need for Dominion help whether in the form of offsetting policies, financial help for governments, or direct relief.

A simpler alternative policy, though the relevant facts were less clearly known then than now, would have been to avoid a general increase in the tariff and take positive action to prevent the appreciation of the Canadian dollar in terms of sterling. Such action would, if accompanied by credit expansion, in varying degrees, have raised the prices, in Canadian currency, of both exports and imports and would have increased the tourist trade. It would have bettered the position of the domestic producer subject to foreign competition in the home market while at the same time improving the position of the export producer. It would have decreased rather than increased an inter-regional strain that was already very great. In fact the pressure on the export regions was very greatly relieved following the devaluation of the United States dollar, the further depreciation of the Canadian dollar to the level of the pound, and the general price rise in 1933. In so far as a policy of preventing the appreciation of the dollar in terms of sterling might have resulted in a rise in domestic prices (or a stay in their fall), it would have reduced the advantage otherwise accruing to exporters and the tourist industries but the relative *burden* of debt charges and other rigid costs would also have been reduced for debtors throughout the whole economy.

This alternative was not without its difficulties and disadvantages. Its adoption would have increased the money burden of external debt—a burden unevenly distributed over regions and institutions. It might have given temporarily a severe shock to business confidence and still further contracted investment. It might have intensified financial defaults, insolvencies and unemployment in the protected industries but on the other hand it would have reduced them in the exposed industries.

The importance of these disadvantages was then, and still is, a matter of opinion. It is not necessary for present purposes to offer an individual opinion as to which policy it would have been more desirable, from the point of view of the country as a whole, to adopt. It is sufficient to point out that the set of policies adopted necessitated larger inter-regional transfers of income than would, under the alternative policy, have been necessary.

Prior to 1929, monetary policy was not a matter of political concern. Any alternative to a policy of maintaining rigid exchange rates by adherence to the gold standard was a heresy without political support. While trade was expanding and capital imports flowed freely, the advantages of this policy, which was essentially one of leaving decisions of monetary policy to the great creditor nations, were overwhelmingly preponderant for a small country with rudimentary machinery for monetary control. Circumstances are now different. London is no longer the dominant creditor centre. Creditor nations have at times since 1929 followed quite divergent monetary policies. There is a presumption that it will not be, in the future, a matter simply of following but of choosing whom to follow. The establishment of the Bank of Canada has supplied machinery and is accumulating experience both of which were previously lacking. It is not improbable therefore that monetary policy in the future may be much more a matter of deliberate choice than in the past—choice to be exercised in the last analysis by the Dominion government. Recent Canadian history has shown that the policy selected may have marked differential effects on regional incomes and on government expenditures in the several regions, and may necessitate through the medium of government finance substantial inter-regional transfers of income quite possibly in different directions at different times.

Chapter VIII

THE ECONOMIC OUTLOOK AND DOMINION-PROVINCIAL RELATIONS

Within the period of development which was of determining influence and up to the Great Depression, Canada experienced a rapid rate of expansion. The discovery of new resources, the tapping of new areas by transportation lines, a fructifying stream of capital imports, expanding export markets, and increased values given to resources by technological changes had promoted the expansion of population and industry. That expansion had proceeded in a framework of integrating national policies—policies designed to enlarge the internal circulation of goods and to increase the inter-dependence of the several regions.

For a time the economy had approached a simple unity with wheat as the dominant and highly specialized export, and subordinate exports fairly evenly distributed over the several regions. That simple unity, from the war period on, had been progressively broken by the rise of newsprint, gold, the base metals, and (thanks to the Panama Canal) British Columbian lumber, as major exports. Regions, hitherto having a high degree of dependence on the prairie market, developed major export markets and specialized export areas of their own. British Columbia had become an exporting region, dependent to a much less extent than formerly on the prairie market. Ontario and Quebec had developed great export areas within their own boundaries—areas whose speculative and market possibilities dimmed the importance of the prairie market. To a degree, this change raised centrifugal forces from minor to major importance. Yet though greater diversity in major exports had replaced the earlier simple unity, the dependence of the economy on specialized exports, produced in specialized exporting areas, had increased rather than decreased.

Without trying to forecast an economic future which is likely to be influenced so largely by political decisions external to Canada, one can usefully point out certain probable characteristics of that future which will affect profoundly governmental and fiscal problems.

1. Variability of Export Income

Though other exports have arisen to dispute the predominance of wheat, the proceeds of exports will still be liable to marked variations. As long as the monetary demand for gold continues, the proceeds of gold exports are likely to fluctuate inversely to the fluctuations of other exports. Newsprint exports have, in the past, demonstrated their variability in the face of business fluctuations. It is unlikely that by reason of market expansion, competitive shift, or increasing availability of resources or power, the steep upward trend of the pre-depression years will be resumed; the fact of a much slower rate of expansion in itself increases the difficulty of adjustment to changed market conditions. Given wise management and a less rigid financial structure, however, the industry is not inherently unstable. Base metals because of their use chiefly in producers' and some durable consumers' goods and because their prices represent but a small fraction of the total cost of such goods, are subject to sharp fluctuations in price. Lumber, and especially British Columbian lumber, is likely to show marked variability as an export both in volume and price not merely because of its dependence on construction cycles but because of the very high proportion which the cost of transportation bears to the mill price. Though costs of ocean transportation are themselves highly variable, their fluctuations have, in the past, accentuated rather than lessened the fluctuations of lumber prices. The variability of wheat in price, yield, and grade may be less than it has been since 1930 but there is every likelihood of its being greater than between 1920 and 1930.

Thus while it is not necessary to assume a recurrence of the purely fortuitous coincidence of agricultural and industrial crises and prairie drought, it is entirely probable that Canada will experience in the future sharp variations in the proceeds of exports. Under stable world conditions these will be less than under unstable conditions, but under any conditions the Canadian economy will be liable to relatively great fluctuations.

Because of the greater diversity of specialized exports, it is probable that, somewhat more than

in the past, fluctuations in income will differ in timing and extent in the different regions. As in the past, however, the interdependence of the regions will be sufficiently great for each to share, though neither proportionately nor immediately, in the fortunes of the others.

2. Less Rapid Rate of Growth

There is little basis for assuming that the future rate of expansion of the Canadian economy will be as great as between 1900 and 1930. In the past, the rate of economic growth has been dependent on the expansion of exports and the related volume of investment.

There are no large unsettled areas of agricultural land which can be settled with the speed or with accompanying investment of such magnitude as when the wheat-growing region was settled. Even though prosperity returns in full measure to prairie agriculture the density of rural population is more likely to decrease than increase. If under exceptionally favourable circumstances it should increase, the rate of increase will be much lower than before 1930.[32]

Our other major exports are based on resources which (with the exception of water power) are subject to depletion. Expansion of these industries will be dependent chiefly on the discovery of new resources or on technological changes making known resources available. The extent of forest resources is well known and they are subject to a high rate of depletion. While the rate of exploitation of mining resources has in the past decade been high because of technical improvements or high prices, the rate of discovery has been low. The expansion has been on the basis of known, not newly discovered, resources. Fortunate circumstances may again bring rapid expansion but the greater probability is that rates of economic and population growth will be less than in the past.

3. Heavy National Overhead Costs

It is a commonplace that during the periods of rapid expansion, the Canadian economy as a whole, with the support and at times the leadership of the Dominion government, undertook developmental expenditures on a grand scale. Transportation expenditures were but the chief example. The expenditures could be justified ultimately only by a continuous rate of rapid growth. Transportation expenditures were made without suspicion that in twenty-five years, the railway, for important parts of the transportation field, would be obsolete. Even aside from misdirection, the scale was so large as to result in over-capacity.

To a high degree, the lavish use of government bonds, government guarantees, corporation bonds and mortgages, made overhead costs fixed charges. To them were added heavy war costs. As long as the national money income was rising rapidly whether from rising prices or increased production neither the weight nor the rigidity of such overhead costs was alarming. With declining prices or less rapid rate of growth they have become much more intractable. In association wth fluctuating money income, whether national or regional, the decreases not merely increase financial difficulties but throw changes in income disproportionately on exposed industrial and occupational groups.

If the outlook is for less rapid expansion, then unless there is a substantial rise in prices, these rigid charges are likely to be even more troublesome than in the past.

These probabilities mean that in the future the Canadian economy is likely to have less margin for waste and errors. The fortunes of different regions are likely to differ and unless there is a decline in the scope of governmental functions where there has hitherto been a continuous increase, there will be required at times substantial transfers of income between regions through the medium of government finance. Whether such inter-regional transfers, as may be required in the future, should be inter-governmental transfers, or whether they should be made entirely or in large part through the Dominion's fiscal system, is a matter of judgment requiring political and administrative rather than economic expertness. Such transfers have been required in the past and similar, if less severe, conditions are likely to recur. In the case of the important and growing export areas of northern Ontario and Quebec, substantial transfers of income were made mainly through the medium of provincial finance. In the case of other provinces, more highly specialized in their dependence on exports, similar circumstances necessitated in greater or less degree, not merely inter-regional but inter-governmental transfers of income.

[32] See Study by W. J. Waines, *Prairie Population Possibilities.*

The following is a complete list of the research studies prepared for the Royal Commission on Dominion-Provincial Relations and available with the Commission's Report:—

In Printed Form:

APPENDIX	1—Summary of Dominion and Provincial Public Finance Statistics		$2.00 each
"	A—Dominion of Canada Public Finance Statistics in detail		5.00 "
"	B—Prince Edward Island Public Finance Statistics in detail		5.00 "
"	C—Nova Scotia Public Finance Statistics in detail		5.00 "
"	D—New Brunswick Public Finance Statistics in detail		5.00 "
"	E—Quebec Public Finance Statistics in detail		5.00 "
"	F—Ontario Public Finance Statistics in detail		5.00 "
"	G—Manitoba Public Finance Statistics in detail		5.00 "
"	H—Saskatchewan Public Finance Statistics in detail		5.00 "
"	J—Alberta Public Finance Statistics in detail		5.00 "
"	K—British Columbia Public Finance Statistics in detail		5.00 "
		—or $50.00 for set	
"	2—D. G. Creighton.	British North America at Confederation	.50 "
"	3—W. A. Mackintosh.	The Economic Background of Dominion-Provincial Relations	.50 "
"	4—D. C. MacGregor, J. B. Rutherford, G. E. Britnell, J. J. Deutsch.	National Income	.50 "
"	5—Esdras Minville.	Labour Legislation and Social Services in the Province of Quebec	.50 "
"	6—A. E. Grauer.	Public Assistance and Social Insurance	.50 "
"	7—J. A. Corry.	Difficulties of Divided Jurisdiction	.50 "
"	8—L. M. Gouin and Brooke Claxton.	Legislative Expedients and Devices adopted by the Dominion and the Provinces	.50 "

In Mimeographed Form:

J. A. Corry.	Growth of Government Activities since Confederation	.50 "
A. E. Grauer.	Labour Legislation	.50 "
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